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SEEDS

**EVERYTHING FOR FARM
GARDEN and POULTRY**

◆ ESTABLISHED 1876 ◆

The **I. W. SCOTT COMPANY**

500 LIBERTY AVE. • 113 DIAMOND ST. • PITTSBURGH, PA.



SCABIOSA (Mourning Bride)

- 1. Azure Fairy Pkt. 15 cts.
- 2. Cherry-Red Pkt. 15 cts.
- 3. Black Prince Pkt. 15 cts.

ONE
PACKET EACH
OF THESE

6 Varieties

for

85c.

(\$1.00 VALUE)

Collection A



SNAPDRAGON, Rustproof

California Giant Mixture. Pkt. 25 cts.



NEW DWARF MARIGOLD, Harmony

Pkt. 15 cts.



ZINNIA, Mammoth Dahlia-flowered, Mixed. Pkt. 15 cts.

Specializing in EVERYTHING FOR FARM • GARDEN & POULTRY

Webster defines a specialist as one who devotes himself to some special branch of learning or art or business. For more than 60 years we have been specializing in the finest and best varieties of seeds, reliable implements and tools, insecticides, fertilizers, and the many and varied things required by farmers, gardeners, and poultrymen.

During all these years of experience we have accumulated a vast fund of information and feel that we are able to serve you to your permanent satisfaction and profit. Tell us your needs and we will suggest only the best thing possible to

fill each of your requirements. We have no desire to sell you anything that will not be of the utmost value to you.

From the beginning our policy has always been to offer quality merchandise at fair prices. With our 1937 Catalogue we pledge ourselves anew to maintain this same policy. We appreciate the confidence placed in us by our many customers, and we wish to thank them for their good will and continued patronage. We also welcome with pleasure the many new friends which we hope to serve this year.

THE I. W. SCOTT COMPANY

General Information

FREE DELIVERY

At prices named in this Catalogue, on Vegetable Seeds, Flower Seeds, Grass Seeds, and Bulbs, *We Deliver Free* anywhere in the United States.

On other goods where the order amounts to \$2 or more (except where priced otherwise), *We Deliver Free* in Pennsylvania, Ohio and West Virginia. Customer pays transportation charges on orders less than \$2.

Free deliveries are made at our option by truck, or by mail, express, or freight to your nearest post office, express office, or freight station.

Parcel Post Shipments

Where the Catalogue provides that postage be added to the remittance, include for postage as follows:

Smaller than 1-lb.	20-lb. package....\$0.30
package .....\$0.08	25-lb. package.... .37
1-lb. package ..... .10	50-lb. package.... .65
2-lb. package ..... .11	Smaller than 1-pt.
3-lb. package ..... .12	package ..... .08
4-lb. package ..... .13	1-pt. package.... .10
5-lb. package ..... .14	1-qt. package.... .15
10-lb. package ..... .19	½-gal. package... .20
15-lb. package ..... .25	1-gal. package... .25

Order Early. Our rush season comes in the months of April and May. To relieve congestion and reduce to a minimum the delay in filling orders, we solicit the cooperation of our customers by placing their orders early and taking delivery before the rush begins.

Price Changes. Prices are subject to change without notice. Should the price of any commodity be reduced, the difference in price will be refunded, or in case of advance, the customer will be notified before shipping.

Quantity Rates. Half-bushels will be furnished at bushel rates; half-pecks at the peck rate; and half-pounds at the pound rate.

Terms. Our terms are cash with order, and prices are net, with no discounts. Remittances should be sent by Money Order, Registered Letter, Bank Draft, or Check. Amounts less than \$1 may be sent in postage stamps.

Charge accounts may be arranged for at our office.

C. O. D. We will accept orders for shipment C. O. D. except on shrubs, roses, cabbage and strawberry plants, or other perishable goods.

Non-Warranty. We give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, or plants we sell, and will not be responsible for the crop. No responsible seedsman gives any warranty. If the purchaser does not accept the seeds on these terms, they are to be returned at once.

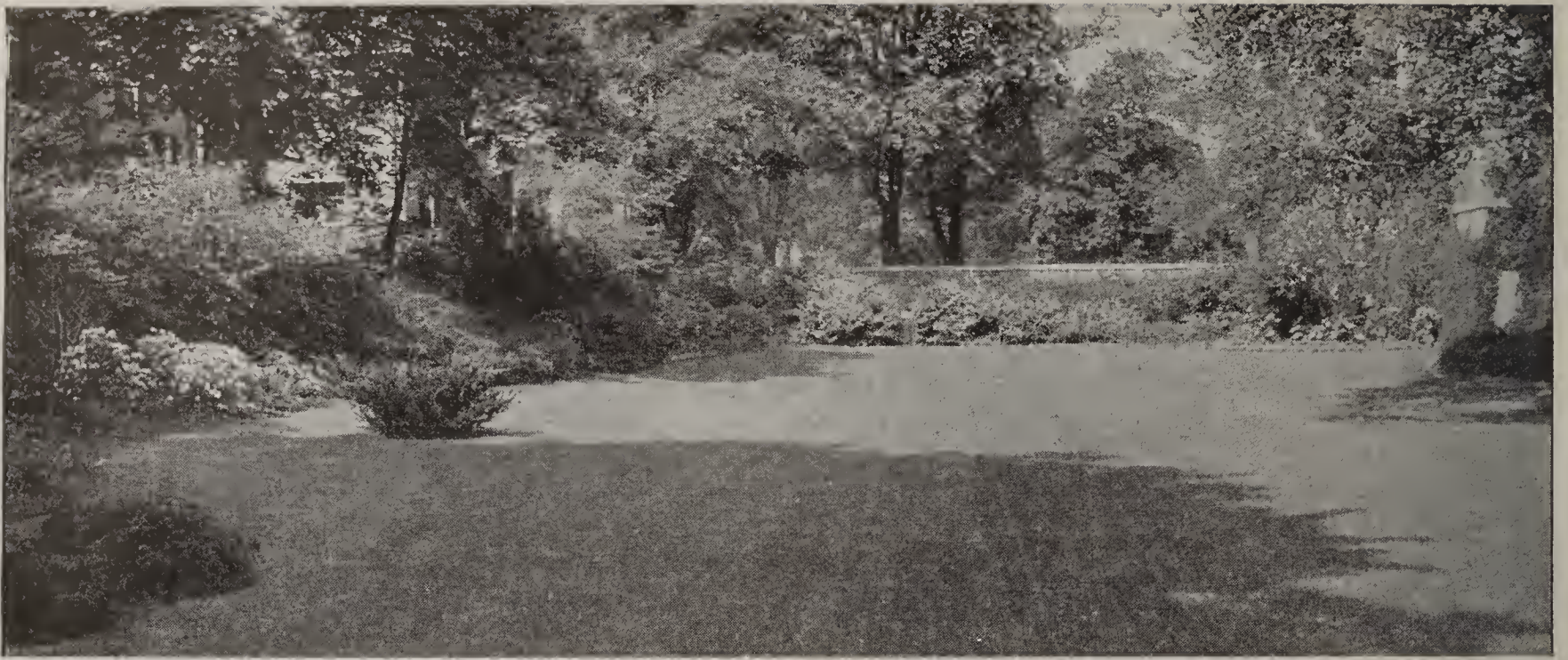
THE I. W. SCOTT COMPANY

The I. W. SCOTT COMPANY

500 Liberty Avenue }
113 Diamond Street } PITTSBURGH, PA.

Telephone ★ Atlantic 2022

TELEPHONE ORDERS GIVEN PROMPT
AND CAREFUL ATTENTION



Scott's Lawn Grass Mixtures

The first and most important requirement for a smooth, lasting green lawn is pure, vigorous seed of the most suitable varieties of grass. No one kind of grass will meet all the varying conditions of climate and soil. For best results it is necessary to sow a mixture of different sorts, but to avoid trouble with weeds and have a solid green lawn at all times and under all conditions, such a mixture must be composed of the right kinds of grass in the right proportions.

The Scott Lawn Grass Mixtures are made of the best re-cleaned American and European grass seeds it is possible to procure. They contain no "fillers," such as unhulled Red-Top, light-weight Blue Grass, etc., and

they are as free from weeds as the most modern and careful methods of harvesting and cleaning can make them. They have been used in making thousands of fine lawns. Better lawn grass mixtures cannot be made. It pays in the end to sow the best seed. As a rule, good seed costs very little more than low-grade seed and the results are well worth the difference.

Fertilizers. After the soil has been well prepared we recommend that a high-grade fertilizer be used. We have a complete line of fertilizers, and prices and descriptions will be found on pages 64 to 67.

"Lawns, How to Make and Maintain Them." A carefully prepared leaflet, free to those who ask for it.

We are prepared to furnish special Grass Mixtures. Prices will be quoted on receipt of specifications.



Scott's "Purity" Lawn Grass Seed

This mixture, which was developed by us over 25 years ago, has been continually studied and improved and today is without a doubt the best mixture for general lawn sowing. It is composed of the finest re-cleaned varieties of grass seeds in a blend which produces a velvety turf of rich, even green color, which retains its luster from early spring until late in the fall. Sow at the rate of one pound to each 250 square feet, or 150 pounds per acre. A measured bushel will weigh about 27 pounds.

1/2 lb. 30 cts., lb. 55 cts., 2 lbs. \$1.05, 5 lbs. \$2.50, 10 lbs. \$4.75, 25 lbs. \$10.75, 100 lbs. \$40.

Scott's "Superfine" Lawn Seed

For those who desire an extra-fine lawn grass mixture we offer Scott's "Superfine" Lawn Seed. It is composed of the same fine re-cleaned grass seeds as our "Purity" brand but with a quantity of an expensive Bent Grass seed added. It will withstand hard wear as well as the heat and drought of summer and the frost action of winter. One pound will sow 400 square feet, or 100 pounds an acre. A measured bushel will weigh about 32 pounds.

1/2 lb. 35 cts., lb. 65 cts., 2 lbs. \$1.25, 5 lbs. \$3, 10 lbs. \$5.75, 25 lbs. \$13, 100 lbs. \$50.

Scott's "Evergreen" Lawn Grass Mixture

We believe this is the best mixture that can be sold at our prices. It is composed of re-cleaned grass seed which will produce a good, thick turf.

1/2 lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. \$2, 10 lbs. \$3.75, 25 lbs. \$8.25, 100 lbs. \$30.

Scott's "Purity" Shady Lawn Mixture

A mixture from grasses which we know will thrive in the shade of trees and buildings where ordinary grasses will not prosper. Use the same quantities as for our "Purity" Lawn Grass Seed.

1/2 lb. 35 cts., lb. 65 cts., 2 lbs. \$1.25, 5 lbs. \$3, 10 lbs. \$5.75, 25 lbs. \$13, 100 lbs. \$50.

Scott's "Terrace" Lawn Mixture

Terraces and embankments require grasses that establish themselves quickly and produce strong, well-developed root-systems. The grasses used in this mixture are all varieties answering these requirements and will give results.

1/2 lb. 30 cts., lb. 55 cts., 2 lbs. \$1.05, 5 lbs. \$2.50, 10 lbs. \$4.75, 25 lbs. \$10.75, 100 lbs. \$40.

All Lawn Grass Mixtures delivered prepaid at above prices



GRASS SEEDS

MIXED CREEPING BENT. A superior Grass for putting-greens on account of its dwarf growth and its narrow leaves. It will grow and make good turf in good or bad soils, and dry weather or heavy rains seem to have no serious effects. About forty pounds of seed are required for an acre. Lb. \$1.25, 10 lbs. \$11.50, 25 lbs. \$27.50.

COOS COUNTY BENT or SEASIDE BENT (*Agrostis alba maritima*). A fine-leaved, bright green Grass used principally on golf-courses for putting-greens. Its texture is fine and uniform, and under good cultural conditions, on soils of reasonable fertility, it will form a sod very quickly. It makes a very good growth in rather dense shade, and spreads with great rapidity, largely by surface-creeping stolons that root at the nodes. Lb. \$1.25, 10 lbs. \$11.50, 25 lbs. \$27.50.

COLONIAL BENT (*Agrostis capillaris*). A tight, thick turf, permanent under close mowing. Good for putting-greens and fairway mixtures. Lb. \$1.10, 10 lbs. \$10, 25 lbs. \$23.75.

ASTORIA BENT (*Agrostis capillaris*; *Astoriana*). An underground creeper, making a deep, heavy sod of fine texture and color. Lb. \$1.10, 10 lbs. \$10, 25 lbs. \$23.75.

RED-TOP (*Agrostis alba*). A valuable Grass for hay, pasture or lawn. It will grow on any soil that is not extremely dry. With the possible exception of Kentucky Blue Grass, it surpasses all other Grasses for lawn-making, and is an extra-good variety for golf-grounds and other places where the turf must withstand hard usage. About fifteen to twenty pounds of seed will be required for an acre. We handle nothing but the solid re-cleaned seed, having discarded the unhulled and chaff grades. Lb. 45 cts., 10 lbs. \$4, 25 lbs. \$9.50.

KENTUCKY BLUE GRASS (*Poa pratensis*). Kentucky Blue Grass is most valuable for pastures and lawn planting. For lawns it is indispensable and, when well established, the lawn will last for years, as the Grass makes an extra-close fine-textured turf. The seed should be mixed with other Grasses that mature earlier, for Blue Grass is very slow in both germinating and maturing. Lb. 45 cts., 10 lbs. \$4, 25 lbs. \$9.50.

ROUGH-STALKED MEADOW GRASS (*Poa trivialis*). A thick-matting, stoloniferous species which makes a heavy turf and is well adapted to shady situations when sown with other grasses. Prefers light moisture and does not do well in dry, exposed places. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

DOMESTIC RYE GRASS. A mixture of Italian and English Rye Grass grown in the United States. Quick-growing and often used for a nurse grass or temporary turf. Lb. 30 cts., 10 lbs. \$2.50, 25 lbs. \$5.50.

ITALIAN RYE GRASS (*Lolium italicum*). Makes a dense turf when sown thickly or mixed with other Grasses. It is most useful on medium moist soils and grows very rapidly into a bright green sod. Lb. 40 cts., 10 lbs. \$3.50, 25 lbs. \$8.

PACEY'S PERENNIAL RYE GRASS (*Lolium perenne*, *Pacey*).

A fine-leaved Grass, not as coarse as the ordinary variety and more resistant to cold. An excellent green on fairways or anywhere that a quick-growing sod is needed. An excellent nurse Grass for slow-germinating Grasses. Lb. 40 cts., 10 lbs. \$3.50, 25 lbs. \$8.

CHEWING'S NEW ZEALAND FESCUE (*Festuca rubra fallax*).

A fine, needle-like sod excellent for putting-greens and lawns. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

RED FESCUE (*Festuca rubra*). A close, long-lasting turf for dry, sandy soils. Excellent at the seashore. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

SHEEP'S FESCUE (*Festuca ovina*). Bluish "bunch Grass," useful for mixtures, for dry lands and pastures. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

HARD FESCUE (*Festuca duriuscula*). A wiry bluish gray Grass for dry lands. Extremely hardy. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

CRESTED DOG'S-TAIL (*Cynosurus cristatus*). A low-growing Grass that makes extra-dense turf in rich, moist soils; is also desirable for putting-greens and lawns. Will grow equally well in the shade or the sun. About seventy pounds of seed will be required for an acre. Lb. 60 cts., 10 lbs. \$5.50, 25 lbs. \$12.50.

ORCHARD GRASS (*Dactylis glomerata*). A quick-maturing Grass that is used for pasture and hay. It may be cut several times during the year, but it is advisable to use the machine before the plants show the seed-heads. From thirty to thirty-five pounds will be required for an acre. Lb. 45 cts., 10 lbs. \$4, 25 lbs. \$9.50.

TIMOTHY (*Phleum pratense*). One of the most important hay Grasses, sometimes used to nurse lawns made on rough soil. The most valuable hay plant. Lb. 20 cts., 5 lbs. 75 cts., 10 lbs. \$1.25.

WHITE DUTCH CLOVER (*Trifolium repens*). Valuable for quick lawns and permanent pastures. $\frac{1}{4}$ lb. 20 cts., $\frac{1}{2}$ lb. 35 cts., 1 lb. 60 cts., 10 lbs. \$5.50.

PERMANENT PASTURE MIXTURE

A well-balanced pasture-producing mixture made up of the very highest grades of re-cleaned grass and clover seeds, which will produce an abundant and nutritious food-supply for all kinds of stock. The land should be plowed in the fall, left rough over winter, and prepared in the spring, making the seed-bed as fine as possible by repeated harrowing. After seeding, the land should be rolled. An occasional top-dressing of fertilizer high in nitrogen is advisable after the grass is established. Sow 40 pounds to the acre. A bushel weighs about 28 pounds. 5 lbs. \$2.50, 10 lbs. \$4.50, 25 lbs. \$9.50, 100 lbs. \$35.

Above prices subject to market changes. On account of market fluctuations prices on larger quantities will be quoted on request. Prices quoted above include prepaid delivery



Growing Flowers from Seeds

For best results, use a shallow box filled with light, rich soil not likely to bake or form a crust when the surface dries, and which has been treated with Formaldehyde Dust or Semesan. Tamp firmly, so that the level is about half an inch below the top of the box. Make shallow furrows crossways, about an inch apart. Very fine seeds, like Petunias and Portulacas, need merely marks; large seeds, like Scabiosas, Lupines, and Four-o'Clocks, should have furrows a half-inch deep. Sow the seed thinly in the rows, and label each row. Sift fine soil, mixed with sand, over the seeds, covering them to the soil-level. Then press the surface with a board or a brick, and water with a very fine nozzle or sprinkle the surface with a whisk-broom dipped in water. Cover the box with a sheet of glass and newspaper, and set it in a warm position, watching from day to day to see that the surface does not get dry or become soggy.

As soon as the seedlings break through the ground, the newspaper must be removed and the box set where it will receive the largest amount of sunlight. When the first leaves are fully formed, remove the glass or tilt it to admit air; when the seedlings are all up and gathering strength, take off the glass.

Special care will be needed in watering. If too much water is used, the seedlings are likely to damp off; if not enough, they will not grow rapidly.

While the seeds are growing, prepare other boxes into which to transplant them. Fill with light, rich soil and mark the surface into 2-inch squares, and when the seedlings have acquired their second set of leaves, transplant them. They will need shading until they take hold of the ground. After that, give them plenty of light and water until it is warm enough to set them outdoors.

If you have a coldframe, the seedlings may be transferred from the seed-trays to the coldframe instead of into boxes.

Perennials require exactly the same treatment, except that sowing may be delayed until the annuals are out of the way, and the seedlings may be grown on in a temporary nursery until autumn when they must be moved to the beds in which they are to flower next year.

Good results can also be obtained by sowing most annuals outdoors any time from early April to June.

Acroclinium

Annual

Double Large-flowering Hybrids. Beautiful Everlasting Flowers in salmon, apricot, pink, rose and cerise, white and creamy tones with golden centers. For drying, cut as soon as they open. Pkt. 10 cts., ¼oz. 25 cts.

Ageratum • Floss Flower

Annual

Excellent for low borders and edging, and is often used for porch-boxes. Can be sown outdoors in May, but to have blooms earlier start indoors in March.

Blue Perfection. Pretty, deep lavender-blue flowers. Plants grow about 15 inches high. Pkt. 10 cts., ¼oz. 40 cts.

Dwarf Blue Boy. A new variety only about 4 inches high. Very uniform growth, completely covered with bloom in rich shades of blue. Pkt. 25 cts., ¼oz. 75 cts.

Imperial Dwarf Blue. Perfectly formed little plants about 8 inches tall, with flowers of clear blue. Pkt. 10 cts., ¼oz. 40 cts.

Little Blue Star. Tiny plants, not over 5 inches high, covered with masses of bright blue flowers. Pkt. 25 cts., ¼oz. 75 cts.



Alyssum saxatile

Alyssum

Annuals and Perennials

The ever-popular and always satisfactory flower for edging beds or planting in porch-boxes or rockeries. Sow the seed in the open ground any time from early April to June. Blooms all summer.

Lilac Queen. Annual. Dwarf, compact plants rarely 6 inches high. Flowers deep lavender-lilac. A very pretty variety. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Little Gem. Annual. A dwarf form which makes dense, round, little bushes about 6 inches high, covered with very white flowers. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Saxatile compactum, Blanket of Gold. Perennial. Bushy plants a foot high. Tiny bright yellow flowers in clusters. A good rock-plant. Pkt. 10 cts., ¼oz. 40 cts., oz. \$1.25.

White Carpet. Annual. The name describes it—a carpet of white only 2 to 3 inches high. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

White Sweet. Annual. The old-fashioned variety. Low-growing and spreading. Sweet-scented, pure white flowers. Pkt. 5 cts., ¼oz. 15 cts., oz. 50 cts.

Amaranthus

Annual

Start seed in house or hotbed early in spring, or in a special seed-bed outdoors later on and transplant to place where they are to bloom.

Molten Fire. One of the most beautiful foliage plants. Grows 4 feet high and each lateral produces a poinsettia-like tuft of flaming fire. Pkt. 15 cts., 1/4oz. 75 cts.

Sunrise. Crimson foliage with a strong tinge of bronze. A cluster of bright scarlet leaves grows at the end of each branch. Extremely showy. Pkt. 25 cts., 1/4oz. \$1.

Tricolor. Joseph's Coat. Tall, erect plants with luxuriant foliage gorgeously marked with scarlet, yellow, and green. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Aquilegia • Columbine

Perennial

Favorite border perennials, blooming in May and June and thriving best in moist, partially shaded spots. Sow seed from May to August. Plants require no protection over winter.

Long-spurred Hybrids, Mixed. These are the finest of the Columbines, producing large flowers in a great variety of delightful colors. Pkt. 10 cts., 1/4oz. 75 cts., oz. \$2.50.

Long-spurred Hybrids, Mrs. Scott Elliott's Strain, Mixed. From May to midsummer these will give a wonderful show of color. Plants grow about 3 feet high and flower profusely. Mixed colors, pkt. 25 cts., 1/4oz. \$1, oz. \$3.50.

Arabis • Rock Cress

Perennial

Alpina. Mountain Rock-Cress. Excellent rock-garden or edging plant. Foliage gray-green. Flowers white, in early spring. Pkt. 10 cts., 1/4oz. 25 cts.

Arenaria • Sandwort

Perennial

Grandiflora. Trailing plant with bright green foliage, suitable for rock-crevices or well-drained banks. Flowers white, with pale green centers. Pkt. 25 cts.

Montana. Popular rock-garden trailer with creeping stems and tiny, light green foliage. Flowers glistening white, with pale, apple-green eyes. Pkt. 25 cts.



Aquilegia, Mrs. Scott Elliott's Strain

Antirrhinum • Snapdragon

Annual

A free-blooming garden flower of the easiest culture, producing its spikes of lovely flowers all summer and fall.

Sow the seed in April, transplanting, when 2 to 3 inches high, to the garden.

TALL GIANT-FLOWERED. A fine strain for bedding or cutting as the spikes are heavy and long.

Apple Blossom. Soft apple-blossom-pink.

Canary Bird. Brilliant canary-yellow with deeper yellow lip.

Cattleya. Fine spikes of orchid-lavender—a lovely shade.

Copper King. Velvety bronzy copper.

Old-Gold. Rich old-gold, flushed rose.



Antirrhinum (Snapdragon)

Orchid. That peculiar shade known by this name.

Purple King. Glowing dark velvety crimson-purple.

Ruby. Rich velvety ruby-red.

Snowflake. Pure white, with yellow lip.

The Rose. Deep rose-pink.

Finest Mixed. A mixture of all the colors.

All Tall Giant-flowered Antirrhinums, pkt. 25 cts., 1/4oz. \$1, oz. \$3

HALF-DWARF LARGE-FLOWERING, MIXED. A nice strain for bedding, with heavy spikes of good length for cutting. Good mixture of colors. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

GIANT-FLOWERED, MAJESTIC TYPE (RUSTPROOF), MIXED. Our new rustproof strain of the Tall Large-flowered type. Try these where rust has been troublesome. A fine mixture of all colors to be found in this type. Pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50.



Arctotis

Arctotis

Annual

Its rich and abundant blooming makes it a very desirable plant for cutting.

Giant Hybrids. A brilliant assortment of orange and bronzy red shades, rose, cream, yellow and salmon. Should be started indoors early. Pkt. 25 cts.

Grandis. Blue-eyed African Daisy. Plants 2 feet high, with silvery white foliage and 2 1/2-inch, daisy-like, silvery white flowers with sky-blue eyes. Pkt. 10 cts., 1/4oz. 25 cts.

Armeria • Sea-Pink

Perennial

Rock-garden or edging plant making handsome, evergreen, mossy tufts from which rise clustered flowers like clover blossoms.

Cephalotes. Giant Thrift. Rose and White. Pkt. 10 cts., 1/4oz. 75 cts.

Laucheana. Dwarf Thrift. Bright rose. Pkt. 25 cts., 1/4oz. \$2.



Arenaria montana



Aster, California Giant



Aster, Heart of France

Asters *Annual*

Asters prefer an open, sunny situation and they respond amazingly to fertilizers and good cultivation. It is advisable to change the location of the Aster-bed each year if you want large flowers and lots of them. For early bloom, start the seed in a window-box or hotbed, in March, giving the little plants plenty of light and water as required, and thinning 3 to 4 inches apart, or transplanting them when a few inches high to small pots. Set them out after danger from frost is past. For solid beds of color, set the plants 8 to 10 inches apart, but if large flowers and long stems are wanted for cutting, plant at least 1 foot apart in rows 1 1/2 to 2 feet apart. The seed may be sown outdoors in early May with good results except that the plants will bloom later.

EARLY-BLOOMING

Queen of the Market. (Wilt-resistant Strain.) Low, bushy plants bearing quantities of large flowers from July on.

White	Lavender
Pink	Purple
Crimson	Mixed Colors

All Queen of the Market Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

MIDSEASON BLOOMING

Improved Crego. (Wilt-resistant Strain.) Large flowers, often 5 inches across, with twisted and curled petals, are freely produced on long stems. They bloom just after the early varieties.

Blue Flame	Light Blue
Cattleya (orchid)	Peach Blossom
Crimson	Shell-Pink
Dark Violet	White
Deep Rose	Mixed

All Improved Crego Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50



Aster, Aurora

GIANTS OF CALIFORNIA IMPROVED. Large, full flowers of the Crego type, with curled and interlaced petals, on long, heavy stems. Strong, upright plants that bloom from late summer until frost.

Carmine-Rose	Light Blue
Dark Purple	Peach Blossom
Light Purple	White
Mixed	

All Giants of California Improved Asters, pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50

CALIFORNIA SUNSHINE, MIXED.

Immense, single flowers, 4 to 5 inches across, with a single row of petals surrounding large yellow quill-like center discs. Branching plants 2 to 3 feet tall. Excellent for cutting. Mixed colors, pkt. 25 cts., 1/4oz. \$1, oz. \$3.

GIANT BRANCHING LATE-BLOOMING. (Wilt-resistant Strain.) A wilt-resistant strain of late-blooming Asters. Valuable to finish the season.

Crimson	Deep Rose
Dark Blue	White
Mixed	

All Giant Branching Late-blooming Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

MISCELLANEOUS TYPES

AURORA. A free-flowering Aster with large, full flowers, quilled centers and outer band of broad petals.

Blue. Light blue, yellow center. Pkt. 25 cts.

Golden Sheaf. (Wilt-resistant.) Double; yellow. Pkt. 25 cts.

Edelweiss. (Wilt-resistant.) Dwarf plants 6 to 8 inches high, covered with semi-double, snow-white flowers in early September. Pkt. 25 cts.

Heart of France. (Wilt-resistant.) Medium-sized flowers of rich dark red. Branching plants 1 1/2 to 2 feet high. Blooms in late August. Pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50.

Super Giant, El Monte. This fine Aster received special mention in the 1936 All-America Selections. Large crimson flowers, with interlaced, plume-like petals. Each plant produces 6 to 8 of these huge flowers. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.



Giant California Sunshine Asters

Asters

Perennial

Michaelmas Daisies. Tall, autumn-flowering Daisies in various shades. **Mixed Colors.** Pkt. 15 cts., 1/4oz. 75 cts., oz. \$2.50.

Balloon Vine • Love-in-a-Puff

Annual

A rapid-growing annual climber with dark green leaves and small white flowers, followed by curious balloon-like seed-pods. Pkt. 5 cts., 1/2oz. 25 cts.

Balsam • Lady's Slipper

Annual

Tall Double, Mixed. Large flowers, resembling camellias, in self colors, as well as spotted and blotched varieties. The seed should either be started inside or sown outdoors late in May when the soil and weather are warm. Pkt. 5 cts., 1/4oz. 25 cts., oz. 75 cts.

Begonia

Tender Perennial

The Begonias are great favorites, both as pot-plants in the home in winter and for outdoor bedding during the summer. Seed is fine and must be sown on well-prepared, rich soil in the greenhouse or in shallow boxes placed in a warm, sunny window.

Gracilis, Luminosa. Large bright scarlet flowers. Pkt. 25 cts.

Prima Donna. Light rose-pink flowers. Extra fine. Pkt. 25 cts.

Tuberous-rooted Begonia Bulbs. See page 18.

Bellis • English Daisy

Biennial

Double Giant-flowered, Mixed. Useful for beds and edging, thriving in partial shade or full sun. Will bloom the first year if seed is planted very early under glass but best results are obtained by sowing seed in late summer and carrying over winter in a cold-frame. Fine mixture of colors. Pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.



Annual Calliopsis

Calliopsis (Coreopsis) Tickseed

Annual

Easy to grow, free-blooming, and a favorite for cutting. Especially nice for edging beds or for planting in pots. Sow in April or May and thin to stand 6 to 8 inches apart.

Crimson King. Deep crimson, yellow backs.

Drummond. Golden Wave. Medium tall, covered with bright golden yellow flowers with brown centers.

Golden Ray. Golden yellow.

Tiger Star. Yellow and brown.

Mixed. A variety of colors.

All Calliopsis, pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Cannas

Annual

Large-flowered, Dwarf, Mixed. Saved from brilliantly colored varieties, including red, yellow, and various striking combinations. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

For Canna Roots, see page 19.

Campanula Medium Canterbury Bells

Biennial

Lovely, bell-shaped flowers. One of the finest border plants. Sow the seed any time from early June to August, and protect the plants with straw or leaves over winter.

Single Varieties, Mixed. The true "Canterbury Bells." Good mixture of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Calycanthema, Mixed. Cup-and-Saucer. A very pretty double form in a good mixture of colors. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.



Calendula, Campfire

Calendula • Pot Marigold

Annual

Among the brightest and easiest to grow of all garden annuals. They prefer a sunny location but will thrive on any soil. Sow the seed during April or May and thin the plants to 8 to 10 inches.

Campfire. A vigorous grower with large, brilliant orange flowers having a scarlet sheen and a full yellow center. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Chrysantha (Sunshine). Superb new variety with rich, gleaming yellow flowers like quilled Chrysanthemums. The rays are long and slender, curving inward. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Lemon Queen. Like Orange King but the flowers are clear lemon-yellow. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Orange King. Large, double flowers of deep glowing orange. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Orange Shaggy. Deep orange color, shading lighter at the center of flower. Long, fringed, overlapping petals make the blooms graceful and attractive. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Radio. A new type. Full flowers with quilled petals; rich glowing orange. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Double Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Canary-Bird Vine Tropaeolum peregrinum

Annual

A quick-growing, slender annual vine with light green, fern-like leaves and brilliant yellow flowers. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 45 cts.

Carnations

Early Dwarf Double, Mixed. Biennial. Dwarf, erect, free-flowering strain. Extremely hardy. Grows 15 to 18 inches tall. Comes in a wide range of colors. Pkt. 25 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Enfant de Nice, Mixed. Annual. The plants are robust and upright, with long, strong stems and flowers $2\frac{1}{2}$ to 3 inches in diameter. It is the last word in this popular flower. Good mixture of colors. Pkt. 25 cts., $\frac{1}{8}$ oz. 75 cts.

Grenadin, Cardinal-Red. Perennial. An early-flowering type with large brilliant scarlet blooms. Pkt. 25 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Marguerite, Mixed. Annual. An improved, large-flowering strain. The flowers are very fragrant, and last for a long time when cut. Sow early in May. Pkt. 10 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.



Giant Hyacinth-flowered Candytuft

Candytuft • Iberis

One of the best of all low-growing plants for beds and edging. Sow the seed early in the spring, and when the seedlings are strong enough, thin them to stand 6 to 8 inches apart.

ANNUAL VARIETIES

Giant Empress. Extra-large, pure white flowers. Nice for cutting as well as bedding. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 65 cts.

Giant White Hyacinth-flowered. Immense, pure white spikes with large individual bracts. Strong plants. An improved florists' variety for cutting or pot-culture. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 65 cts.

Umbellata. Blooms quickly from seed. The flowers are in flat clusters and are produced for many weeks.

Lilac
RoseCrimson
Mixed

Each, pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 65 cts.

PERENNIAL VARIETIES

Gibraltarica Hybrids. A compact form with lilac flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Sempervirens. Perennial or Evergreen Candytuft. Bears pure white flowers in the spring, and the leaves are dark glossy green the year round. Fine for edging. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.



Carnation

Cardinal Climber

Annual

A slender, quick-growing vine with exceedingly ornamental, deeply cut leaves, and small, star-shaped flowers of a brilliant cardinal-red, borne in the greatest profusion. Sow after the weather and soil are warm. Pkt. 15 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Castor-Oil Bean • Ricinus

Annual

Extremely large plants that may be used for ornamental hedges, for the center of beds of cannas, and as individual specimens wherever a tropical effect is wanted. Sow in May.

Zanzibarensis. A giant strain, that sometimes grows 12 feet high. Dark green, bronze, or reddish foliage. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Finest Mixed. Many different types, varying in color of leaf, stalks, fruit, etc. All large. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Celosia

Annual

These make gorgeous beds and are useful also for borders where bright colors and mass effect are desired. The seed should be started indoors in April or sown in well-prepared soil outdoors late in May.

Childsi, Mixed. Chinese Woolflower. A profusion of massive, wool-like flowers in shades of red and pink. The whole plant is a mass of glowing color, resembling an enormous bouquet. Height 3 feet. Sow seed outdoors after danger of frost is past. Finest mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Cristata, Finest Mixed. Cockscomb. Showy, comb-like heads in a variety of rich colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

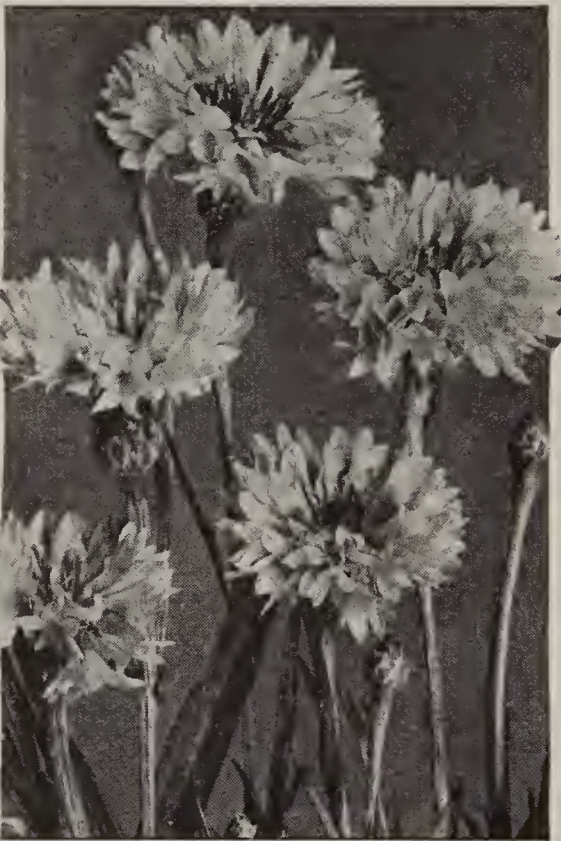
CRISTATA PLUMOSA. IMPROVED FEATHER TYPE.

Pride of Castle Gould. Pyramidal growth with large, painted plumes of brilliant red. Fine for either bedding or pot-culture. Pkt. 15 cts., $\frac{1}{4}$ oz. \$1.50.

Scarlet. A brilliant scarlet selection of the lovely feather type. Pkt. 15 cts., $\frac{1}{4}$ oz. \$1.



Celosia Childsi (Woolflower)



Centaurea cyanus

Centaurea

Annual

A family of very popular and easy-to-grow flowers.

CYANUS. Familiarly known as "Cornflower," "Ragged Sailor," or "Bachelor's Button." About 1½ feet tall, thriving in almost any situation and blooming freely for a long season.

Double Blue. Deep blue Cornflower.

Double Maroon. Fine for a mixed bouquet.

Double Rose-Pink. A lovely shade for cutting.

Double White. A pure white Cornflower.

Double, Mixed. A select mixture of many colors.

All Centaurea Cyanus, pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

IMPERIALIS. The Giant Sweet Sultan, one of the largest of the Centaurea family and the finest for cut-flowers. The large blooms are borne on long stems and are very fragrant

Lavender

Rose

Lilac

White

Purple

Mixed

All Centaurea imperialis, pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1

GYMNOCARPA. Dusty Miller. Grows but a foot high. Excellent for edging beds and borders. Foliage is fern-like and of silvery gray color. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Chrysanthemums

Chrysanthemums thrive in rich soil in any sunny situation and bloom very freely. They require plenty of water.

Coronarum, Double Annual, Mixed. Full-centered flowers in shades of cream, lemon, and gold. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Leucanthemum. Shasta Daisy. Perennial. Hardy plants with lovely white flowers for cutting.

Alaska. Magnificent single flowers of pure white, 5 inches or more in diameter. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Alaska, Double. A double form of the above, with beautiful shaggy white flowers. Pkt. 25 cts.

Cerastium

Perennial

Tomentosum. Snow-in-Summer. A perennial rock-plant with white foliage and starry white flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Clarkia

Annual

Elegans. An attractive variety that makes loose, shrubby plants 2 to 3 feet high, covered with dainty flowers. Nice for cutting.

Double and Single, Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. 75 cts.

Cobaea

Annual

Scandens. Cup-and-Saucer Vine. An annual climber that grows quickly and makes a good screen of foliage. The flowers are large and bell-shaped, blue in color. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. 75 cts.

Coleus

Annual

Choice Mixed. Popular bedding plants grown for their ornamental variegated foliage. Sow seed in boxes indoors and transplant to the open late in May. Pkt. 25 cts.

Coreopsis

Perennial

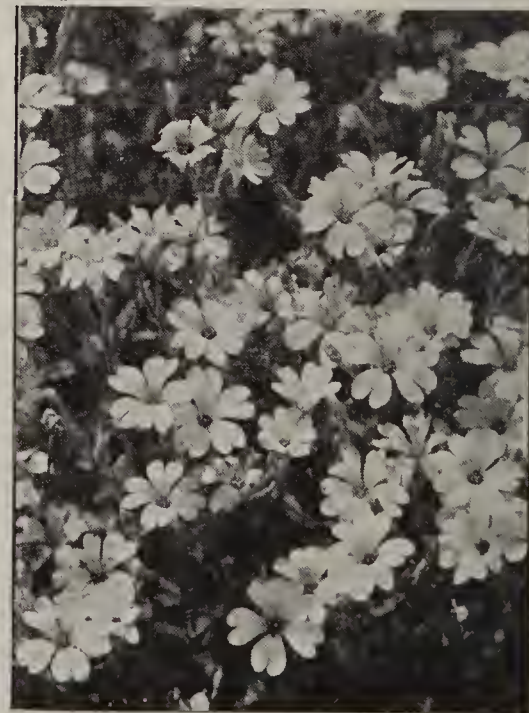
Double Sunburst. Large, golden yellow, fully double flowers 3 to 3½ inches in diameter. A superb cut-flower, or a mass of garden color. Pkt. 15 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Grandiflora. Easily grown from seed sown any time during late spring or summer and, being perfectly hardy, the plants require no protection in winter and will live for years. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Cypress Vine

Annual

Finest Mixed. A graceful, slender climber with very finely cut foliage and bright little flowers which are produced in the greatest profusion. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Cerastium tomentosum



Cosmos

Cosmos

Annual

Their free-blooming habit and graceful flowers make the Cosmos one of the most popular flowers for late summer and fall use. Sow seed outdoors about May 1, or, if possible, start the seed indoors in early March.

Early Klondyke, Orange Flare. Gold Medal, 1935 All-America Selections. Deep brilliant orange flowers, borne on long stems. Nice for cutting. Plants 2 to 3 feet high. Pkt. 15 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Extra-Early, Double-crested. An improved strain of the double-flowering form of Cosmos, and while the flowers vary in degree of doubleness, all are beautiful.

Pink Beauty. Soft rosy pink.

Crimson King. Deep rose-crimson.

White Queen. Pure white.

Finest Mixed. All colors.

All Double-crested Cosmos, pkt. 15 cts., $\frac{1}{4}$ oz. 85 cts., oz. \$2.75

Lady Lenox. Blooms enormous, of a most attractive shade of shell-pink. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Mammoth Early-flowering, Mixed. Large-flowered strain which blooms early. Best to use for late sowings outdoors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Mammoth Late-flowering, Mixed. Plants 6 to 8 feet, blooming in September. Large flowers 4 to 5 inches across. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Sensation. Award of Merit, 1936 All-America Selections. Flowers 4 to 5 inches across, on long stems, from 4-foot plants. Blooms for 10 weeks from sowing. Flowers Pink and White. Pkt. 15 cts., $\frac{1}{4}$ oz. 85 cts., oz. \$3.

Didiscus

Annual

Cerulea. Blue Lace Flower. Exquisite, lacelike flower-heads of dainty azure-blue, gracefully borne on long stems. Sow seed in March in hotbed and outdoors in May and June. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Dahlias

Annual

It is easy to raise Dahlias from seed, if started early in spring in hotbed or in a warm window. Set plants out late in May in sunny location, a foot or more apart.

Cactus-flowered, Mixed. Seed saved from the best of the popular Cactus type. Pkt. 25 cts.

Double, Finest Mixed. Seed saved from some of the best named sorts. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Single, Fine Mixed. Seed saved from select flowers of single varieties. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.

Delphinium Perennial Larkspur

The finest of blue flowers for the hardy border are the Delphiniums, or Perennial Larkspurs. Sow the seed in May or June and transplant about 1 foot apart in early September. Perfectly hardy.

Belladonna. Long, loose spikes of delicate light blue flowers, of supreme value for cutting, and an excellent garden plant. Pkt. 25 cts., $\frac{1}{8}$ oz. 75 cts., $\frac{1}{4}$ oz. \$1.25.

Bellamosa. This is a taller, straighter plant than Belladonna, and the flowers are rich clear blue, several shades darker. Very striking and handsome. Pkt. 25 cts., $\frac{1}{8}$ oz. 75 cts., $\frac{1}{4}$ oz. \$1.25.

Blackmore & Langdon Strain, Mixed. A famous strain with lovely flowers in a wide range of colors. Strong plants with excellent spikes. Pkt. 50 cts.

Kelway's Gold Medal Hybrids. A famous English strain of great size and vigor, producing flowers in all shades of blue. Pkt. 25 cts., $\frac{1}{8}$ oz. 50 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.25.

Wrexham (Hollyhock Strain). Sturdy plants producing conical spikes of flowers 2 inches or more across, and $2\frac{1}{2}$ to 3 feet long. The colors range from clear light blues and lavenders to shades of deep blue, purple, and mauve. This strain has become very popular. Pkt. 25 cts., $\frac{1}{8}$ oz. \$1.25, $\frac{1}{4}$ oz. \$2.



Delphiniums



Dianthus Heddewigi

Dianthus

A large family of easily grown flowers loved for their fragrance and all-round usefulness.

Chinensis, Double. China Pink. Annual. All plants 20 inches high, with flowers in clusters, in many bright colors. Free-blooming type. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Deltoides. Maiden Pink. Perennial. A creeping rock-garden plant with deep rose-colored flowers on 8-inch stems in midsummer. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Double Mayflower, Mixed. Perennial. Dwarf plants with double flowers in shades of pink. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Heddewigi. Japanese Pinks. Annual. Dwarf, compact plants 10 to 12 inches tall, with large, spectacular flowers, fine for cutting as well as making a grand garden display.

Double, Fireball. Crimson.

Double, Mourning Cloak. Blackish maroon, margined white.

Double, Violet Queen. Violet.

Double, Mixed. All colors.

All Heddewigi, pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts., oz. \$1.25

Single, Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Plumarius. Garden Grass Pinks. Perennial. The Pheasant-Eye, or Clove Pink should be in every garden. Plants 8 to 10 inches with grass-like foliage and fragrant, fringed flowers. Sow from April to August.

Single, Mixed. Many beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Digitalis • Foxglove

Biennial

A plant for the back of the border. Spikes of thimble-shaped flowers on plants 3 to 4 feet tall, during June and July. Sow in early summer and transplant in the fall.

Hybrida Lutzii. Magnificent, 4-foot plants with lovely salmon flowers. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

Isabellina. Fine spikes of yellow blossoms that deepen to chamois. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

The Shirley, Giant Hybrids. An excellent strain with large flowers ranging in color from white to dark rose, each with throats spotted with crimson, maroon or chocolate. Plants 5 to 7 feet tall, with 4-foot spikes of bloom. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

Finest Mixed. All types and colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Dimorphotheca

Dimorphotheca African Daisy

Annual

Dwarf plants, 12 to 15 inches high, with foliage close to the ground. Daisy-like flowers 2 to 3 inches across, with narrow petals. Flowers close toward evening.

Aurantiaca, Mixed. Shades of yellow, orange, and white. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Aurantiaca, Orange, Improved. An improved strain of the original orange variety. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Dolichos • Hyacinth Bean

Annual

Lablab, Mixed. Very pretty annual climber quickly growing 8 to 10 feet and bearing quantities of clustered flowers like pea blossoms, followed by lustrous purple pods. Good mixture of colors. Sow the seed in late May. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.

Eschscholtzia California Poppy

Annual

These hardy little annuals make very bright beds and bloom from June until frost. Flowers resemble single Poppies. Sow in early spring, where they are to bloom.

SPREADING VARIETIES

Aurantiaca. Orange.

Carmine King. Deep carmine.

Chrome Queen. Amber-yellow.

Mikado. Orange-crimson.

The Geisha. Brilliant gold inside, orange-crimson outside, fluted.

All Eschscholtzias, pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1

Mixed. All colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

ERECT VARIETY

Ramona. Golden bronze, coppery rose outside, frilled and incurved. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Euphorbia

Annual

Variegata. "Snow-on-the-Mountain." Showy plants growing about 2 feet high, with ornamental deep green foliage, bordered and marked with white. Seed should be sown during May. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.



Eschscholtzia, Ramona

Four o'Clock • Mirabilis

Annual

Jalapa, Mixed. "Marvel of Peru." Makes most effective beds and annual hedges. The plants grow about 2 feet tall, bearing quantities of fragrant flowers which open late in the afternoon. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Gaillardia • Blanket Flower

Extra-good bedding plants, and especially desirable cut-flowers.

Burgundy. Perennial. A new variety with large, wine-colored flowers. Very choice. Pkt. 25 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.

Maxima aurea. Perennial. Rich golden yellow flowers with a large red eye. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Picta, Mixed. Annual varieties in various colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

The Dazzler. Perennial. Very large flowers of blazing orange-scarlet, illumined by a brilliant yellow edge at the tip of each ray or petal. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Geranium

Annual

Fine Mixed. Great favorites for bedding and window-boxes. Seed saved from the choicest varieties. Pkt. 25 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.



Geum, Mrs. Bradshaw



Gaillardia, The Dazzler

Geum • Avena

Perennial

Lady Stratheden. Practically the same plant as Mrs. Bradshaw, except that the flowers are shining golden yellow. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$3.

Mrs. Bradshaw. Handsome, fairly dwarf border plant with attractive foliage, and double scarlet flowers with crimped and ruffled petals. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$3.

Globe Amaranth Gomphrena

Annual

Mixed Colors. The plants grow 2 to 3 feet tall, with globe-shaped flowers which may be cut and dried in their natural color for winter bouquets. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Godetia • Satin Flower

Annual

The plants are bushy, with attractive foliage, and the flowers are quite large, somewhat resembling single hollyhocks. Godetias make fine pot-plants.

Dwarf Double Azalea-flowered, Mixed. Lovely azalea-like flowers in various brilliant colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Sybil Sherwood. An upright plant with single flowers of bright salmon-pink. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Gourds

Annual

In addition to their interesting fruit, many of which are useful as well as ornamental, the vines have large foliage excellent for covering fences, stumps, trellises, etc. Sow the latter part of May.

Calabash Pipe or Powder-Horn. An intriguing pipe-shaped variety. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Cave-Man's Club. Dark green; knobby; club-shaped. Pkt. 10 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.

Dipper. The ripe fruits, cut away and cleaned out, make very serviceable dippers. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Dish-Cloth. Sometimes called Sponge Gourd. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Ornamental, Mixed. Includes a great number of interesting and diverse forms. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.



Gypsophila elegans alba grandiflora

Gypsophila • Baby's Breath

These are largely used in making up bouquets and are also most attractive garden plants.

Elegans alba grandiflora. Annual Baby's Breath. An improved strain with pure white flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Paniculata alba, Single. Perennial. Tiny white flowers in airy sprays. Excellent for cutting. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Paniculata alba, Double. Fine sprays of little, double, pure white flowers. Dries nicely for winter bouquets. Pkt. 25 cts., $\frac{1}{8}$ oz. \$1.

Repens alba. Perennial. A trailing variety, not over 6 inches high, with white flowers in July and August. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Repens rosea. Perennial. Rose-colored variety of the above. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Helianthemum • Sun Rose

Perennial

Mutabile, Mixed. Rock-plant of shrubby habit, growing 8 to 12 inches high. Foliage evergreen. Flowers of pastel shades. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Helianthus • Sunflower

Annual

Sow the seed in April or May and give the plants plenty of room. Fine for massive borders and backgrounds.

Dwarf Double Chrysanthemum-flowered. Strong plants, growing 4 to 5 feet high, with many branches bearing big, double flowers like golden chrysanthemums. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 75 cts.

Mammoth Russian. The common variety and the largest and most productive, growing to a height of 6 to 8 feet. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts.

Maroon Prince. Single red flowers on 4-foot plants. The best red Sunflower. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Miniature (*H. cucumerifolius*). Single bright yellow flowers, with dark brown centers. Fine for cutting as well as display. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Helichrysum • Everlasting

Annual

The best of the "Straw Flowers." To preserve the flowers for permanent bouquets, pick them when half opened and hang them by the stems, head down, to dry in a shady place. Double, bright-colored flowers.

Fireball or Scarlet **Salmon Queen**
Goldenball **Silverball**
Rose Queen **Violet Queen**
Finest Mixed

All Helichrysums, pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Heliotrope

Annual

Choice Mixed Colors. Prized for its delightful fragrance. Can be grown in pots or in the garden. Start the seed indoors in March, or sow outdoors after the soil and weather are warm. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

Hesperis • Rocket

Perennial

Matronalis. Sweet Rocket. The plants make large clumps 2 to 3 feet high, with showy spikes of red flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Hibiscus • Marsh-Mallow

Perennial

Finest Mixed. Shrubby perennials 4 to 6 feet tall with large foliage and immense, funnel-shaped flowers 6 to 12 inches across. Fine mixture of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Hollyhock

Perennial

Wherever tall-growing plants can be used these are wonderfully effective, with a charm all their own. A favorite for the old-fashioned garden.

Chater's Double, Mixed. An extra-fine strain in many bright colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

Single, Finest Mixed. Lovely single flowers in a wide range of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Double Hollyhocks



Helianthemum mutabile

Honesty • Lunaria

Biennial

An easily grown plant, about 1 $\frac{1}{2}$ feet high. The blooms may be dried for winter bouquets. Violet or White, pkt. 15 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

Humulus • Japanese Hop

Annual

A very rapid-growing annual vine which, on account of its dense, attractive foliage, is valuable for porch-screens and arbors.

Green-leaved or **Variegated-leaved.** Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 60 cts.

Hunnemannia • Tulip Poppy

Annual

Sunlite. Semi-double flowers of clear canary-yellow. Very desirable. Grows 1 $\frac{1}{2}$ to 2 feet tall, with many blooms all summer. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Ipomoea • Morning-Glory

Annual

Fine for covering fences and trellises on account of their rapid, luxuriant growth. They bloom freely all summer. The seed may be soaked in warm water over night to hasten germination.

Heavenly Blue Improved. Blue Moonflower. An early strain of this lovely flower. Deep sky-blue flowers of large size from mid-summer until frost. Start seeds under glass, early. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1.

Imperial Japanese, Mixed. Large flowers of various pleasing colors. Sow where they are to bloom as soon as ground gets warm. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts., lb. \$3.50.

Noctiflora. White Moonflower. Large white flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.

Job's Tears • Coix

Annual

Lacryma. An ornamental grass which grows 2 to 3 feet high and bears large, ivory-white seeds from which it gets its name. The children make necklaces from the hard seeds. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.

Kochia*Annual*

Scoparia trichophylla. Summer Cypress; Mexican Firebush. Grows about 2 feet high making beautifully rounded bushes like clipped evergreens. In summer, foliage is bright, light green but in fall the whole plant is a ball of crimson. Sow seed in late May. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Lantana*Annual*

Dwarf Hybrids, Mixed. Desirable bedding plants, giving a mass of color; also useful in porch-boxes and pots. Flowers are in clusters. Blooms constantly. Pkt. 15 cts., 1/4oz. 60 cts., oz. \$1.75.

Larkspur*Annual*

Favorite, easy-to-grow annuals, producing their tall spikes very freely for several weeks during summer. They are most effective planted in the border in groups among lower-growing flowers. Sow the seed in April and thin or transplant to stand 8 to 10 inches apart.

GIANT IMPERIAL. A new strain of annual Larkspurs that grows 3 to 4 feet high. Fine well-filled spikes.

Blue Bell. Deep sky-blue.

Blue Spire. Clear violet-blue.

Carmine King. Deep, glowing pink with a fiery sheen, almost scarlet.

Daintiness. Delicate lavender.

Miss California. Brilliant rose-pink.

White King.

All Giant Imperial Larkspurs, pkt. 25 cts., 1/4oz. 75 cts.

TALL DOUBLE STOCK-FLOWERED.

Plants 3 feet tall, with candelabra-like branches and long spikes closely set with large, double flowers.

Rosamond. *New.* A lovely shade of pure bright rose. Pkt. 25 cts., 1/4oz. \$1.

Fine, Mixed. All the colors of this type. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

DWARF EMPEROR, MIXED. A dwarf, compact strain not over 2 feet tall in an unusual range of colors. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

For Hardy Larkspur, see Delphiniums, page 9.



Lupinus

Lathyrus**Everlasting or Hardy Sweet Pea***Perennial*

Finest Mixed. Hardy climbers, attaining a height of 5 to 6 feet each season and living from year to year. Flowers resemble the old-fashioned Sweet Peas except that they have no fragrance. Pkt. 10 cts., 1/4oz. 25 cts., oz. 40 cts.

Lily • Lilium*Perennial*

Regale. Most popular and easiest to grow of all Lilies, flowering abundantly within 18 months from seed. Perfectly hardy. Pkt. 25 cts.

For Lily Bulbs, see page 19.

Linum • Flax*Perennial*

Showy plant with gray-green foliage and powder-blue flowers of great delicacy and beauty. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.



Stock-flowered Larkspur, Rosamond

Linaria • Toadflax*Annual*

Slender little plants a foot high, bearing dainty, miniature Snapdragons of pink and purple. Excellent for edging.

Maroccana, Fairy Bouquet, Mixed. Compact, 8-inch plants with flowers of various pastel shades. Pkt. 25 cts.

Maroccana, Hybrid Excelsior, Mixed. Plants 1 foot high, with flowers of bright shades. Pkt. 10 cts., 1/4oz. 25 cts.

Lobelia*Annual*

Crystal Palace Compacta. Rich dark blue flowers. Dark green foliage. Dainty little plants, popular for porch-boxes, vases, and low beds. Seed should be started indoors in February or March and the plants set out in May. Pkt. 15 cts., 1/4oz. \$1.50.



Linaria maroccana

Lupinus • Lupin

The Lupins do well in any good garden soil, preferably with a little shade. They make bushy plants with very attractive leaves and long spikes, closely set with blossoms. Give them plenty of lime, wood-ashes, bonemeal, or other soil-sweetening fertilizers.

Hartwegi, Mixed Colors. Annual. Quick-growing annuals with woolly foliage and stems. Erect spikes with pea-shaped flowers. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Polyphyllus, Mixed Colors. Perennial. Grows 2 1/2 to 3 feet tall. Sow in May or June and thin to 1 1/2 feet apart. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Marigold • Tagetes*Annual*

Vigorous, free-blooming annuals, thriving on any soil but preferring plenty of sunlight. The African Marigolds grow about 3 feet tall with immense, globular blooms, while the dwarf French kinds are only about 10 inches high with smaller flowers but more of them.

African, Double, Dixie Sunshine. All-America Winner. A tall, late-blooming variety with ball-shaped flowers of golden yellow. Pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.

African, Double, Guinea Gold. All-America Winner. Double, ruffled flowers of pure deep golden yellow, fragrant and long-stemmed. A handsome cut-flower. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

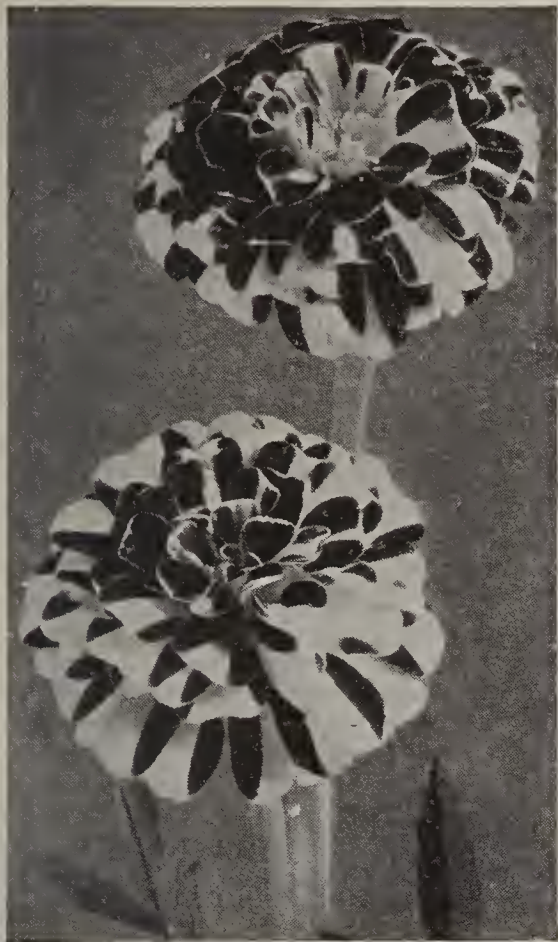
African, Double, Lemon Queen. A companion to Prince of Orange, but clear lemon-yellow. These two varieties, planted on rich soil, produce enormous flowers. Pkt. 10 cts., 1/4oz. 75 cts., oz. \$2.

African, Double, Prince of Orange. Very large and double; deep glowing orange. Pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50.

African, Double, Yellow Supreme. All-America Winner. Extra-large flowers, 3 inches or more across, brilliant lemon-yellow. Excellent garden plant, as it begins to bloom early and continues to hard frost. Splendid for cutting. Pkt. 15 cts., 1/4oz. 50 cts., oz. \$1.50.

African, Double, Mixed. Shades of orange and yellow. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Dwarf French, Double, Harmony. An extra-early variety, making 12-inch mounds of bloom. The flowers are a large-crested cushion of golden yellow petals surrounded by mahogany ray petals. Pkt. 15 cts., 1/4oz. 50 cts., oz. \$1.50.



Marigold, Double French Royal Scot

MARIGOLD, continued

Dwarf French, Single, Legion of Honor. Bushy. Flowers gold and brown. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Tall French, Double, Royal Scot. All-America Winner. Large flowers of mahogany and gold in symmetrical stripes on 30-inch plants. Pkt. 15 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Dwarf French, Double, Finest Mixed. Double flowers of orange and yellow, vari-ously striped and marked with reddish brown. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Signata Pumila, Little Giant. Spread-ing plants 6 inches high, covered with lovely little single flowers of golden yellow. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.

Matricaria • Feverfew

Annual

Double, white, button-shaped flowers on aromatic plants. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Mesembryanthemum

Annual

Crystallinum. Ice Plant. Dwarf annual with tender stems and leaves, portions of which are transparent and resemble little icicles. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Tricolor. Flowers brilliant red and white, with black centers. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Mignonette • Reseda

Annual

Highly valued for its distinct fragrance.

Giant Machet. An improved strain with giant spikes of reddish green florets. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Machet, Special Mixed. Contains all the Machet varieties. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Mimulus

Annual

Moschatus. Musk Plant. Musk-scented foliage and small yellow flowers. Nice for baskets and vases. Pkt. 10 cts., $\frac{1}{8}$ oz. \$1.

Myosotis • Forget-me-not

Biennial

Alpestris. A biennial but it will bloom the first summer from seed sown in early spring. If early spring flowers are wanted, sow in July and transplant the young plants to their permanent bed about the middle of Sep-tember. Pkt. 10 cts., $\frac{1}{8}$ oz. 75 cts.



Mignonette

Momordica

Annual

Vigorous climbing vines with ornamental fruits, and foliage that is dense enough to make a pleasant shade.

Balsamina. Balsam Apple. Flowers yellow, with dark centers. Fruits orange. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Charantia. Balsam Pear. Pear-shaped fruits. Dense foliage. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Nicotiana**Sweet-scented Tobacco**

Annual

Fine annuals for the tall border, thriving best on a deep, rich soil. They grow about 2½ feet high, with large, attractive foliage at the base and clusters of delicately fragrant trumpet-shaped flowers on long stems.

Affinis Hybrids. Pink and red shades in addition to white. A fine sweet-scented strain. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Sanderæ Hybrids. The flowers are larger than the preceding and come in white and shades of pink and red. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Nasturtiums

Annual

We know of no flowers that are easier to grow or give more general satisfaction than Nasturtiums. They do best in poor soil and they flower all summer long in all kinds of weather.

DOUBLE VARIETIES

Dwarf Golden Globe. All-America Win-ner. The first of a new gem type. Flowers double, deep golden yellow, sweet scented. Plants produce a great number of blooms which resemble the famous Golden Glean.

Glorious Glean Hybrids. All-America Winner. From Golden Glean and Scarlet Glean has been derived this remarkable new strain with glorious, double flowers in a beau-tiful array of brilliant colors, all very sweetly scented. Every plant is a profuse bloomer.

Golden Glean. All-America Winner. Compact plants 1 to 1½ feet high, with clear, golden yellow, double flowers. In addition to the remarkable doubling of the bloom, the flowers possess a delicate scent which lacks the usual coarseness of the Nasturtium odor.

Scarlet Glean. All-America Winner. A worthy companion to the famous Golden Glean. The large, double, fragrant flowers are dazzling scarlet. The dwarf, vigorous plants are profuse bloomers all season long.

All Double Nasturtiums, pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$1.50

SINGLE VARIETIES

Dwarf Fine Mixed Colors. Fine for beds and edging, any place where masses of color are desired. The plants are covered with flowers in a wide range of colors from June until frost.

Tall Fine Mixed Colors. The tall or climbing Nasturtiums are useful for covering fences, or may be allowed to trail over stumps and rockwork.

All Single Nasturtiums, pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1

Nigella • Love-in-a-Mist

Annual

Pretty annual 1½ feet high, for bedding and cutting, easily and quickly grown from seed in any sunny spot.

Miss Jekyll, Blue. Fine double azure-blue. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Miss Jekyll, White. Flowers pure white. Double. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Nasturtium, Double Golden Globe



Pansies

Pansies

The best results are secured by sowing in late July or August and protecting the young plants over winter with a covering of strawy manure or a deep blanket of leaves. They will then be ready to begin blooming as soon as the weather opens up in the spring and will continue to flower until hot weather. The next best time to sow is very early in the spring, in February or March, starting the seed in a box indoors or in a coldframe and setting the plants outdoors the latter part of April. If set out in a spot that is shaded part of the day, where the soil is deep and moist, and the flowers picked daily, the plants may be kept blooming all summer.

Giants of California, Mixed. A special mixture of giant types. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Mastodon, Finest Mixed. An American strain with flowers often 2 $\frac{1}{2}$ inches in diameter. Strong in red and purple shades. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Roggli Giant Blotched, Mixed. A Swiss strain with especially fine coloring. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Superfine Giants, Mixed. A fine strain with jazzy colors, rich in yellow, with many five-blotched types. Pkt. 25 cts., $\frac{1}{4}$ oz. \$2.25, oz. \$7.

Fine Mixed Colors. A fine assortment of select varieties for bedding, including many bright and beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Physalis

Perennial

Francheti. Chinese Lantern Plant. Flowers yellow with dark centers, and fruits with blood-red inflated calyx which turn bright red when ripe and resemble Chinese lanterns. Attractive when dried for winter use. Pkt. 15 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

Petunias *Annual*

For solid beds of color, borders and edging, vases and porch-boxes, in fact, for every purpose, the Petunias are surpassed by few if any of the easily grown garden annuals. They come into bloom early and continue to flower profusely all summer long, thriving on poor soil and in the hottest weather. Sow the seed in April or May, scattering it thinly on fine sifted soil and, instead of covering it, press it firmly into contact with the earth with a smooth board. When the seedlings are about 2 inches high, transplant them to the place where you want them to bloom. For extra-early flowers, start seed indoors in March or April.

LARGE-FLOWERING SINGLE FRINGED VARIETIES

Dainty Lady. An entirely new variety, with light golden yellow flowers—a shade previously unknown in Petunias. Pkt. 50 cts.

Dwarf Giants of California, Mixed. (Ramona Strain.) An improved new dwarf strain of the well-known California Giants. Flowers are large and beautifully colored, with open throats, well marked and veined. Pkt. 50 cts.

Elk's Pride. Large and very dark purple, plain edged. Pkt. 25 cts.

Pink Beauty. Clear light pink. Pkt. 25 cts.

Pride of Portland. Deep glowing rose. Pkt. 25 cts.

Scarlet Beauty. Crimson-scarlet. Pkt. 25 cts.

White Beauty. Snowy white. Pkt. 25 cts.

Ruffled Giants, Mixed Colors. Immense single flowers with ruffled and fringed petals, in all colors. Pkt. 25 cts.

SINGLE BEDDING VARIETIES

Blue Bedder. Dwarf, compact, erect plants with fine flowers of mid-blue. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$2.50.

Flaming Velvet. All-America Winner. The large, showy flowers are brilliant velvety blood-red or scarlet. Pkt. 25 cts.

Martha Washington. Blooms are about 3 inches across, with ruffled edges, blush-pink, shading to dark violet in the throat; veins wine-red. Pkt. 25 cts.

Pink Gem. Grows 5 to 6 inches high, forming a compact ball completely covered with deep pink blooms 2 inches across. Pkt. 25 cts.

Rose of Heaven. Brilliant fiery rose, similar to Rosy Morn, but more brilliant. The best dwarf pink variety. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts., oz. \$2.

Rosy Morn. Vigorous plants, 10 inches tall, compact and free-flowering. Flowers soft carmine-pink with white throat. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts., oz. \$2.

Viola, Blue Bird. Violet-blue. Extra fine. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$2.50.

Striped and Blotched, Mixed. Compact plants with flowers striped and blotched. Very striking. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$1.50.

Single, Fine Mixed. An excellent assortment for bedding, including many fine colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$1.50.

LARGE-FLOWERING DOUBLE FRINGED VARIETIES

Alldouble Giant Fringed, Mixed. A magnificent strain produced by careful hand hybridizing. The flowers are large and have beautifully frilled and crinkled petals. These Petunias make splendid pot-plants. Pkt. \$1.

Large, Double-flowering Fringed, Mixed. A fancy mixture which produces a large percentage of doubles. Pkt. 50 cts.



Petunia, Flaming Velvet

Platycodon • Balloon Flower

Perennial

Erect, leafy plants bearing a profusion of inflated, balloon-like buds, opening to wide, saucer-shaped flowers. Good border perennial for late summer blooming.

Grandiflorum. Steel-blue. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Grandiflorum album. White. Pkt. 10 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Portulaca

Annual

The Portulacas will grow on soil too poor and in places too hot and sunny for any other flower. The plants are low and spreading, commencing to bloom in July and blooming profusely all summer. Sow the seed when the ground gets warm.

Double. Flowers like little roses.

Pink	White
Salmon	Yellow
Scarlet	Mixed

All Double Portulacas, pkt. 10 cts., $\frac{1}{8}$ oz. 60 cts., $\frac{1}{4}$ oz. \$1, oz. \$3

Single, Mixed. Very bright and attractive. Good mixture of colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 35 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1.

Primula • Primrose

Perennial

Malacoides, Mixed. Fine free-blooming flower for the rockery and perennial border. Sow the seed inside in February or early March and transplant to the open ground in April. The plants are tender and should be given light protection over winter. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Pyrethrum

Perennial

Very easy to grow from seed sown any time from early spring to late summer. Seed started under glass in February will give blooming plants the first summer. By cutting off the first crop of flowers a second crop will be produced in the fall.

Aureum. Golden Feather. Grown mostly for its showy golden yellow laciniated foliage. Nice for borders. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.

Roseum, James Kelway. Large, daisy-like flowers of deep scarlet. An excellent cut-flower. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.75.

Roseum, Single and Double Mixed. Painted Daisy. These include all shades from deep red to white. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.75.

Phlox Drummondii*Annual*

Blooming in midsummer, these easily grown flowers make the most brilliant of beds. They prefer an open, sunny situation, but are not particular as to soil and will give good results under almost any conditions. Sow the seed in April or early May and thin the plants to stand about 4 inches apart.

TALL VARIETIES (about 15 in. high)
 Crimson Violet, white eye
 Lilac White
 Rose, dark eye Yellow
 Finest Mixed

All Tall Phlox, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

Gigantea, Art Shades. All-America Winner. A lovely strain with flowers over an inch in diameter of soft pastel shades, each with a distinctive eye. Bushy plants about 10 inches high. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.

DWARF VARIETIES *Annual*

Nana compacta, Mixed. These grow about 8 inches high and quite bushy, making fine borders and ribbon beds. Mixed colors, pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.

HARDY VARIETIES *Perennial*

Finest Mixed. Produces large heads of brilliantly colored flowers of many shades. Plants grow 2 to 4 feet high. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Poppy • Papaver

Although the Poppies last for only a short time, while they are in bloom no flowers can rival them in brilliant colors. The seed is fine and should be scattered thinly in the place where the plants are wanted to bloom, as they do not transplant well. Height, 2 feet. Sow the annual sorts in April and the perennial kinds June to September.

ANNUAL VARIETIES

Double Shirley, Dazzler. Double flowers of vivid orange-scarlet. Pkt. 10 cts., 1/4oz. 25 cts.

Double Shirley, Sweet Briar. Double flowers of the same color as the Single Wild-Rose-Pink. Pkt. 10 cts., 1/4oz. 25 cts.

Shirley, American Legion. Brilliant scarlet, single blooms. An improved Flanders Poppy. Pkt. 10 cts., 1/4oz. 25 cts.

Shirley, Wild-Rose-Pink. Single flowers of soft wild-rose-pink. A beautiful flower. Pkt. 10 cts., 1/4oz. 25 cts.



Papaver nudicaule

POPPIES, continued

Shirley, Mixed Colors. Probably the finest strain of annual, single-flowered Poppies. White and pale pink to bright scarlet and deep crimson, including rose with white edge, red with white edge, etc. Very showy. Pkt. 10 cts., 1/4oz. 20 cts.

Tall Peony-flowered, Mixed. Large, double flowers with plain edges in a wide range of colors. Pkt. 10 cts., 1/4oz. 20 cts.

Tulip Poppy (P. glaucum). Dazzling scarlet with a black maltese cross at center. Pkt. 10 cts., 1/4oz. 25 cts.

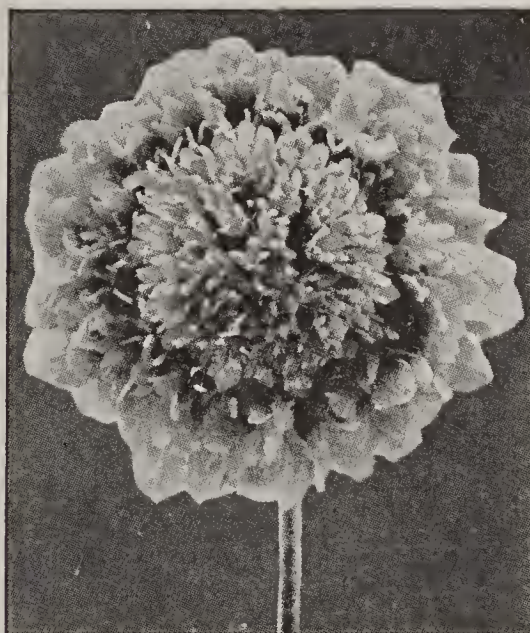
PERENNIAL VARIETIES

Nudicaule, El Monte. Large flowers of deep tangerine-orange. Pkt. 25 cts., 1/4oz. 75 cts.

Nudicaule, Sunbeam Hybrids, Mixed. A fine strain of Iceland Poppies in shades of yellow and orange. Pkt. 10 cts., 1/4oz. 50 cts.

Orientele, Scarlet. The big, bright scarlet Decoration Day Poppy. A hardy perennial form bearing immense single flowers. Pkt. 10 cts., 1/4oz. 50 cts.

Orientele, Mixed. A fine mixture of the various Oriental Poppy colors. Pkt. 10 cts., 1/4oz. 50 cts.



Scabiosa, Peach Blossom

Rhodanthe
Swan River Everlasting*Annual*

Mixed Colors. Can be dried in its natural colors for winter bouquets. It is an easily grown annual, about 1 1/2 feet tall, with silvery gray leaves and very pretty, little, double flowers. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Salpiglossis • Painted Tongue*Annual*

A popular, easily grown garden annual, richly colored and fine for cutting. The flowers are borne in clusters at the top of long stems and are produced very freely from midsummer to fall. Sow the seed in late April or May and thin the plants to stand about 10 inches apart.

Brown and Gold **Scarlet and Gold**
Golden Yellow **Velvety Red**
Light Blue and Gold **Finest Mixed**

All Salpiglossis, pkt. 10 cts., 1/4oz. 35 cts., oz. \$1



Phlox Drummondii, Art Shades

Salvia • Sage

Start the seed indoors or in hotbeds very early, during January or February if possible. When 2 to 3 inches high transplant into small pots or space to 6 inches apart. Transplant to the garden in late May, in a sunny location and rich, deeply dug soil, setting the plants at least 1 1/2 feet apart.

America. Annual. One of the finest of all, particularly for low beds and borders as it grows only about 1 1/2 feet tall. It is an exceptionally profuse and constant bloomer, the plants a mass of light blazing scarlet. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Bonfire. Annual. A select strain, fine for mass planting, as it is very compact in growth and has exceedingly brilliant scarlet flowers. Pkt. 10 cts., 1/4oz. \$1.25, oz. \$3.50.

Farinacea, Blue Bedder. A fine perennial with light blue flowers on spikes about 2 feet long. Seed sown in early May should give plants that bloom from July to frost. Pkt. 15 cts., 1/4oz. \$1.75, oz. \$6.

Splendens. Annual. The original Scarlet Sage. It grows about 2 feet tall and is covered with large, bright red blossoms all summer long. Pkt. 10 cts., 1/4oz. 75 cts., oz. \$2.25.

Zurich. Annual. An early variety only 1 foot high. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Scabiosa • Mourning Bride*Annual*

It is a pity this flower does not have a more pleasing name, for it is one of the finest annuals for cutting. Grows in almost any situation; 2 1/2 to 3 feet high; blooms for a long season.

Azure Fairy. Azure-blue.

Black Prince. A very dark purple.

Cherry-Red. A nice shade of red.

Loveliness. Soft salmon-rose.

Peach Blossom. Peach-blossom-pink.

Shasta. Pure white.

Above Scabiosa, pkt. 15 cts., 1/4oz. 25 cts., oz. 75 cts.

Giant-flowered, Mixed. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Schizanthus • Butterfly-Flower*Annual*

Wisetonensis Excelsior compactus. A dainty little plant 6 inches high, adapted to bedding and borders. Blooms freely during the entire summer. An excellent pot-plant. Finest mixed, pkt. 15 cts., 1/4oz. \$1.25.

Stock • Gilliflower *Annual*

Large-flowering, Mixed. The old-fashioned Ten-Weeks Stocks are beautiful, free-flowering, sweet-scented annuals, requiring a mellow soil but otherwise very easy to grow. Sow the seed in April or May and give the plants 12 to 15 inches of space. Pkt. 10 cts., 1/4oz. \$1.25, oz. \$2.50.

Sweet Peas,
Captain Blood

Sweet Peas

Annual

Sweet Peas bloom best in an open, sunny situation. Keeping the flowers picked as fast as they open prolongs the period of bloom. The old-fashioned or Grandiflora type of Sweet Peas are hardy and very floriferous and the flowers are heavily scented, although of only medium size and rather stiff in form. The new Spencer or Waved Sweet Peas are much larger and finer in form as well as colors, but not quite so free-blooming. Modern gardeners and florists as a rule grow only the Spencer varieties. Plant as early as the ground can be worked, in deeply prepared rich soil. Never allow the soil to dry out after the plants appear.

Scott's Summer-flowering Spencers

Distinguished by giant size, often measuring 2 inches in diameter, and by beautifully waved petals. Hundreds of varieties are known to specialists and new sorts are being constantly produced by English and American breeders, but we believe that the varieties we offer comprise the best and most satisfactory of the new as well as old, in all of the favorite colors.

One ounce of seed will plant a row about
15 feet long

Ambition. Rosy lavender.
Avalanche. Glistening white.
Captain Blood. Brilliant scarlet.
Colorado. Bright orange.
Damask Rose. Deep rose.
Flaming June. Scarlet.
Gigantic. Best white.
Gleneagles. Large; pale lavender.
International. Rich mauve.
Magnet. Bright cream-pink.
Mammoth. Orange-scarlet.
Mastercream. Cream.
Mrs. A. Searles. Bright salmon.
Prince of Orange. Deep orange.
Pinkie. Large; rose-pink.
Reflection. Clear blue.
Susan. Blush-pink.
The Admiral. Violet-blue.
The Sultan. Black, velvety maroon.
Welcome. Dazzling scarlet.

All Spencer Sweet Peas, pkt. 10 cts.,
oz. 30 cts., ¼lb. \$1, lb. \$3

Sweet Pea Mixture

Scott's Finest Mixed Spencers. A wonderful mixture of finest varieties in many beautiful colors. Pkt. 10 cts., oz. 25 cts., ¼lb. 60 cts., lb. \$2.

Scott's Finest Mixed Grandiflora. The old-fashioned, deliciously fragrant kind. Oz. 10 cts., ¼lb. 30 cts., lb. \$1.

Sweet William *Dianthus barbatus*

Biennial

A great favorite in all gardens. Easily grown from seed. The flowers are borne in large trusses and are delightfully fragrant. Sow any time from early spring to July. The plants should stand at least 8 inches apart.

Double Varieties, Mixed Colors. The double flowers are very attractive in form as well as colors. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

Newport Pink, Single. A single variety of a salmon-rose shade. Fine cut-flower. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

Single Varieties, Mixed Colors. A wide range of colors, many with distinct "eyes" or margins of a different shade. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Thunbergia • Black-eyed Susan

Annual

A slender climbing or trailing annual with many little flowers, varying from palest primrose to deep buff-yellow, all with dark centers, from which it derives its common name. Start indoors in February or March. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Tithonia • Mexican Sunflower

Annual

Speciosa. A tall, branching, half-hardy annual with very striking rich orange-scarlet flowers. Fine for clumps in the tall border. Grows 6 feet or more high. Pkt. 15 cts., ¼oz. 50 cts., oz. \$1.75.

Verbena

Annual

Low, spreading plants with handsome dark green foliage and great clusters of sweet-scented flowers all summer long. Old favorites for low beds and edging, also for boxes and vases. Sow indoors in February or March.

GRANDIFLORA GIGANTEA HYBRIDS. A showy type with giant flowers in fine heads. The colors are brilliant and stand out against the lovely green foliage. A continuous bloomer from midsummer on.

Beauty of Oxford. Spectacular heads of nice form. The color-range is from rose-pink to rose-red.

Lavender Glory. Large flowers of pure lavender with a creamy white eye.

Royale. Royal blue with a creamy yellow eye.

Salmon-Pink. A fine shade of salmon-pink.

All Grandiflora Gigantea Hybrids, pkt. 15 cts.,
¼oz. 75 cts., oz. \$2.50

MAMMOTH HYBRIDS. These varieties produce extra-large flower-heads with individual florets often measuring an inch across.

Auricula-Eyed, Mixed.

Blue Shades.

Defiance. Scarlet.

Italian, Striped, Mixed.

Lucifer. Brilliant scarlet.

Pink and Rose Shades.

White.

Mammoth, Mixed.

All Mammoth Hybrid Verbenas, pkt. 10 cts.,
¼oz. 35 cts., oz. \$1

Choice Mixed. Pkt. 10 cts., ¼oz. 25 cts.,
oz. 75 cts.

Veronica • Speedwell

Perennial

Spicata. Sturdy plants bearing erect spikes of dark blue flowers in midsummer. A good low perennial about 18 inches tall, useful for garden decoration and cutting. Pkt. 10 cts., ¼oz. 75 cts., oz. \$2.25.

Vinca rosea

Madagascar Periwinkle

Annual

Forms handsome, bushy bedding plants that bloom profusely all summer from seed sown indoors in February or March, and is fine for pot culture. Height, 1 to 1½ feet.

Finest Mixed. An excellent assortment of Red, White with Rose center, Pure White, and Pink. Pkt. 10 cts., ¼oz. 50 cts., oz. \$1.50.

Wallflower

Perennial

The Wallflowers are perennials but in our rigorous climate they require protection over winter and are best carried over in a cold-frame. Sow the seed indoors in March or outdoors late in May and space the plants about 8 inches apart. The flowers are clustered on spikes 1½ feet tall, and are very fragrant.

Double Varieties, Extra-Fine Mixed. Artistic shades of coppery red, bright brown, bronzy yellow, etc. Pkt. 10 cts., ¼oz. 75 cts., oz. \$2.

Wild Cucumber Vine

Echinocystis

Annual

Lobata. A very rapid-growing, vigorous climber, often running 30 to 40 feet in a season. It bears small, white, slightly fragrant flowers, followed by spiny seed-pods. Pkt. 10 cts., ¼oz. 20 cts., oz. 60 cts.



Verbena, Beauty of Oxford

ZINNIAS • Youth and Old Age

Few flowers provide a more gorgeous display with less care or attention; all they require is a sunny spot to cause them to grow and bloom vigorously from early summer until frost. The seed may be sown in the garden any time during April or May and the plants thinned or transplanted to stand 8 to 18 inches apart, according to variety. The largest specimen blooms are produced on plants that are grown on a mellow, moderately rich soil and given ample room to develop.

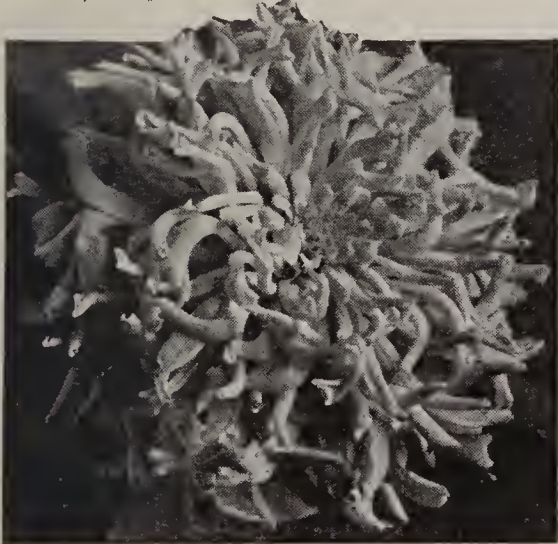
GIANT DOUBLE DAHLIA-FLOWERED VARIETIES. Plants 2½ to 3 feet high, bearing huge, double flowers resembling the Show type of Dahlia.

Crimson Monarch. Deep crimson.
Dream. Deep rosy lavender.
Exquisite. Light rose, deep rose center.
Giant Attraction. Brick-red.
Golden Dawn. Golden yellow.
Illumination. Deep rose.
Oriole. Orange and gold bicolor.
Scarlet Flame. Bright scarlet.

All Giant Double Dahlia-flowered Zinnias, pkt. 15 cts., ¼oz. 40 cts., oz. \$1.25

Finest Mixed. All colors. Pkt. 15 cts., ¼oz. 40 cts., oz. \$1.

ELEGANS, CURLED AND CRESTED. Tall, double flowers with the petals artistically twisted and curled. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.



Zinnia, Fantasy

CHRYSANthemum-FLOWERED

Fantasy, Finest Mixed. All-America Winner. This new chrysanthemum-flowered type has striking and attractive flowers in new and unusual pastel shades. A novelty that has created a sensation wherever shown. Stems long and strong. Pkt. 10 cts., ¼oz. 50 cts., oz. \$1.50.

DOUBLE GIANT VARIETIES. Large, very double flowers, fine for cutting.

Canary-Yellow	Purple
Crimson	Scarlet
Deep Rose	White
Mixed	

Pkt. 10 cts., ¼oz. 35 cts., oz. \$1

DOUBLE MEXICAN HYBRIDS

Haageana, Finest Mixed. Small flowers on low, bushy plants, making a fine display over a long season. Stems are long enough for cutting. An attractive range of colors. Pkt. 15 cts., ¼oz. 40 cts., oz. \$1.25.

DWARF DOUBLE VARIETY. Cut-and-Come-Again. An excellent bedding type not over 2 feet tall. Distinct colors. Finest Mixed. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

POMPON or BABY DWARF VARIETIES. A popular type for cutting. Small, compact flowers on strong-stemmed plants 1½ to 2 feet tall.

Canary Gem	Salmon Gem
Crimson Gem	Scarlet Gem
Lilac Gem	Valencia
Purple Gem	Fine Mixed
Rosebud	

All Pompon or Baby Dwarf Zinnias, pkt. 10 cts., ¼oz. 35 cts., oz. \$1

SCABIOSA - FLOWERED, MIXED. Medium-sized flowers like a Scabiosa, with ray petals surrounding a large cushion. Attractive form and range of bright colors. Pkt. 15 cts., ¼oz. 75 cts., oz. \$2.



Double Dahlia-flowered Zinnia

Flower Seed Mixtures
Scott's Annual Cut-Flower

Here is a mixture of annuals that we do not hesitate to recommend. Anyone is sure to have success with it, and it provides continuous bloom all summer. Pkt. 10 cts., ¼oz. 25 cts., oz. 45 cts., ¼lb. \$1.50.

Scott's Annual Rock-Garden

A carefully selected assortment suitable for the rockery. Especially useful to fill vacancies. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

Scott's Perennial Rock-Garden

A fine collection for permanent plants for the rock-garden. Recommended to the beginner. Pkt. 25 cts., ¼oz. 75 cts., oz. \$2.50.

GARDEN BOOKS

1001 GARDEN QUESTIONS ANSWERED. By Alfred C. Hottes. A guide-book to daily operations, covering the flower-, fruit-, and vegetable-garden. 330 pages; 106 illustrations. Cloth, \$2.

GARDEN GUIDE. A most complete book for the amateur. Written by 28 authors. Covers the entire place from landscaping through the finished garden, both fruit, vegetable, and flower. Chapters on soils, fertilizers, diseases, insects, propagation, transplanting, pruning, winter protection, etc. 576 pages; over 300 illustrations. Cloth, \$2.

LAWNS. By F. F. Rockwell. Shows both how to start a lawn right and how to keep it smooth. 87 pages; 39 illustrations. \$1.25.

THE LAWN. By L. S. Dickinson. 128 pages; illustrated. \$1.25.

SHRUBS. By F. F. Rockwell. 76 pages; 49 illustrations. \$1.25.

THE BOOK OF SHRUBS. By Alfred C. Hottes. 446 pages; 187 illustrations. Cloth, \$3.

THE BOOK OF BULBS. By F. F. Rockwell. Here is the "last word" on bulbs and how to grow them in the garden. Pictures and text show and tell just how to make the most from bulbs in your garden, both outdoors and inside the home. 264 pages; 187 illustrations. \$2.

ALL ABOUT FLOWERING SHRUBS. By T. A. Weston. 186 pages; 8 full-page color-plates; 65 full-page half-tones. Cloth, \$2.

MODERN DAHLIA CULTURE. By W. H. Waite. 134 pages; 6 full-page color-plates and 24 half-tones. Cloth binding, \$1.50.

DAHLIAS. By F. F. Rockwell. It describes the various types and tells their uses, how to plant and grow them, the fertilizers to use, how to control pests, etc. 80 pages; 65 illustrations. \$1.25.

GLADIOLUS. By F. F. Rockwell. 79 pages; 45 illustrations. \$1.25.

ROSES. By F. F. Rockwell. 86 pages; illustrated. \$1.25.

HOW TO GROW ROSES. By Pyle, McFarland, and Stevens. A completely re-written edition of America's most popular rose book. 211 pages; 138 illustrations, including 45 varieties illustrated in color. \$2.

CLIMBING ROSES. By G. A. Stevens. A companion volume to "How to Grow Roses." 32 color-plates and 32 half-tone illustrations. Cloth, \$2.

THE BOOK OF ANNUALS. By Alfred C. Hottes. Revised edition, 180 pages; 158 illustrations. Cloth, \$1.50.

PERENNIAL GARDENS. By H. S. Ortloff. 90 pages; 18 illustrations. \$1.25.

THE BOOK OF PERENNIALS. By Alfred C. Hottes. 280 pages; over 100 illustrations. Cloth, \$2.

PEONIES. By F. F. Rockwell. Tells all about peonies, where and how to grow them, their planting, care, cultivation, propagation, and protection. Illustrated with photographs and drawings. \$1.25.

SUCCESS WITH HOUSE PLANTS. By Kift and Hedenberg. 80 pages; 29 illustrations. 75 cts.

WATER GARDENS AND GOLDFISH. By R. V. Sawyer and E. H. Perkins. 272 pages; 126 illustrations. Cloth, \$2.

ROCK-GARDEN PRIMER. By Archie Thornton. 152 pages; 4 color-plates and 70 other illustrations. Leatherette, \$2.

ROCK-GARDENS. By F. F. Rockwell. Shows just how you can build a rock-garden yourself, on a small or large scale, and at little expense. Let this practical book demonstrate the fascination of this form of gardening and guide you to success. 86 pages; 31 illustrations. \$1.25.

EVERGREENS FOR THE SMALL PLACE. By F. F. Rockwell. All the information you need to make the best use of evergreens is in this handy book. 84 pages; 67 illustrations. \$1.25.

THE OUTDOOR LIVING-ROOM. By L. W. Ramsey and C. H. Lawrence. 139 pages; 98 illustrations. \$2.50.

THE GARDEN NOTEBOOK. By Alfred Putz. Illustrated handbook of home-gardening for each week of the year. 52 working drawings show just what to do, and how. 212 pages. \$1.60.

PLANT PROPAGATION. By Alfred C. Hottes. Easily understood by the amateur but covers propagation by all the approved commercial methods. 238 pages; 136 illustrations. Cloth, \$2.

AROUND THE YEAR IN THE GARDEN. By F. F. Rockwell. It starts with preparations for the season's work in January and outlines a balanced program for the garden through every week in the year. 350 pages; 88 illustrations. \$2.50.

GARDENER'S HANDBOOK. By L. H. Bailey. Comprises brief notes for the amateur on the raising of vegetables and fruits and the growing of many kinds of annuals and perennials in the home-grounds. Arranged alphabetically. \$3.

PRACTICAL VEGETABLE CULTURE. By Albert E. Wilkinson. Useful for both amateur and professional. 308 pages; 135 illustrations. \$2.

MANUAL OF GARDENING. By L. H. Bailey. 539 pages; 350 illus. \$3.

GARDEN FLOWERS IN COLOR. By G. A. Stevens. It has 400 flower pictures in full color. There is a picture on every page, and the brief cultural directions are directly opposite the illustrated flower. 320 pages; 400 photographs in color. \$1.98.

If the book you are wanting is not listed, give us the subject and we will be glad to tell you what is available, and the price

Summer-flowering Bulbs

All Bulbs sent post-paid at prices quoted



Anemone, St. Brigid

Anemone • Windflower

Suitable for pot or border culture and for massing. Soak bulbs 24 hours before planting.

Blue Poppy. A newer variety of a sky-blue color.

De Caen. A very large-flowered, single strain of unique beauty. All colors.

St. Brigid. Very large, vivid flowers of scarlet, pink, purple, etc.

All Anemones, 10 cts. each, \$1 per doz., \$7 per 100

Begonias, Tuberous-rooted

These plants grow from hard, crooked bulbs, like flat potatoes, hollowed on one side. In planting, be sure that the hollow side is up. They make strong, fleshy stems a foot or more high, with big, bristly, very beautiful leaves, crowned by flowers of enormous size and almost unbelievable brilliance. Blooms $4\frac{1}{2}$ to 5 inches across are not unusual. They should be started in pots or pans indoors in February or March, and transplanted to the garden about the time that corn is growing well. They may also be started outdoors at the same time but will bloom later. Separate colors: **Single varieties, white, scarlet, pink, or yellow flowers; Double varieties, red, salmon, rose, or orange flowers.** All varieties, 25 cts. each, \$2.50 per doz., \$16 per 100.

Gloxinia

Beautiful velvety flowers of trumpet shape produced by tender, tropical bulbs which may be grown in pots or greenhouse benches. The large foliage is covered with plush-like hairs, and should not be wet. Keep them warm at all times. The flowers are violet, rose, crimson, white, or beautifully mottled.

Mixed colors. 35 cts. each, \$3.50 per doz., \$28 per 100.

Caladium esculentum

Elephant's Ear

For imposing masses of tropical foliage there is nothing so effective or so easily grown as the Elephant's Ear. The plants grow from 3 to 5 feet high. Plant the bulbs late in May, after all danger from frost is past, spacing them 2 to 4 feet apart and covering them a few inches deep. The larger the bulb, the larger the plant and the more space required. If extra-large plants are desired, start the bulbs indoors in pots or large boxes, in March or early April, and transplant to the open about June 1. Give plenty of water throughout the season; liquid manure is very beneficial.

	Each	Doz.	100
5 to 7-in. circ....	\$0 05	\$0 50	\$3 50
7 to 9-in. circ....	10	1 00	7 00
9 to 11-in. circ....	15	1 50	10 00
11 to 13-in. circ....	25	2 75	20 00
13 to 15-in. circ....	40	4 00	30 00

Hyacinthus candicans

Summer Hyacinth

Tall spikes with scores of drooping, bell-shaped white flowers in midsummer. Very attractive and unusual. Handle like gladiolus. 15 cts. each, \$1.50 per doz., \$10 per 100.

Ismene calathina

Peruvian Daffodil

Enormous, richly fragrant white flowers of the amaryllis type, curiously cupped and most attractive. Grow in warm, sunny soil and treat like gladiolus, except that they cannot be set out until corn is growing outdoors, and the bulbs should be kept warm in winter. 30 cts. each, \$3 per doz., \$22 per 100.



Tuberous Begonia



Gloxinia

Montbretia

Star-shaped flowers in beautiful colors, including scarlet, yellow, apricot, blotched and spotted. They often measure 4 inches across, and are borne in clusters on long stems 3 to 4 feet high.

Mixed colors. 10 cts. each, \$1 per doz., \$7 per 100.

Summer-blooming Oxalis

Charming low, bushy plants for growing in pots or borders, with clover-like leaves and round, cheerful flowers of various shades of pink and crimson which close at night. Continue in bloom for many weeks. 10 bulbs 20 cts., \$1.75 per 100.

Ranunculus

Finest Mixed. Fine, brilliantly colored, double flowers on stems over a foot long for cutting. Double and semi-double, and produced in abundance. 10 cts. each, \$1 per doz., \$7 per 100.

Tigridia

One of the most spectacular flowers grown in gardens. The 5- to 6-inch triangular blooms have three long petals of yellow, orange, white, flesh-pink, or red, and three short petals forming a shallow cup filled with spots, stains, and blotches of red. They last only a day but they continue coming from July until September. Mixed colors, extra-large bulbs, 10 cts. each, \$1 per doz., \$8 per 100.

Tuberose

Old-fashioned flowers valued for their fragrance. Start the bulbs indoors in March and transplant to the open in early May.

White Pearl. The best variety. Flowers creamy white, large, and double.

	Each	Doz.	100
First-Size Bulbs...	\$0 05	\$0 50	\$3 25
Mammoth Bulbs...	10	1 00	7 00



Canna

Cannas

The modern Cannas with their splendid foliage and large, gorgeously colored flowers surpass all other plants for massive beds and heavy borders. They are very easy to grow, thriving best in a sunny, well-drained spot. For extra-large plants and heavy foliage effects, the soil should be well manured.

Ambassador. Brilliant cherry-red flowers of immense size. Foliage and stalks bronze. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Crimson Bedder. Foliage dark green; flowers deep blood-red. Height 3 feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Eureka. The best white-flowering Canna for bedding. Height 4½ feet. 10 cts. each, \$1 per doz., \$7 per 100.

Fiery Cross. Big, substantial carmine-red flowers and beautiful bluish green foliage. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Florence Vaughan. Flowers yellow with red spots; leaves light green. Height 4½ feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

King Humbert. On account of its rich purplish bronze foliage, one of the most handsome. Flowers orange-scarlet, freely produced for a long season. Height 4½ feet. 10 cts. each, \$1 per doz., \$7 per 100.

Meteor. The broad-petaled flowers are dazzling crimson and are carried in big clusters. Foliage deep green. Vigorous and blooms for a long season. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Mrs. Alfred Conard. Rich salmon-pink flowers of great size and substance come in enormous clusters. The finest bedding Canna of its color. 12 cts. each, \$1.25 per doz., \$9 per 100.

Shenandoah. Flowers salmon-pink, borne in large clusters; foliage rich ruby-red. Height 4 feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Statue of Liberty. Flowers blazing flame-red. The foliage is of a rich, luxuriant bronzy shade. The leaves are larger than any Canna we know. Height 6 to 7 feet. 10 cts. each, \$1 per doz., \$7 per 100.

The President. Enormous glowing scarlet flowers of wonderful substance borne erect on strong stems; luxuriant deep green foliage. Blooms continuously from midsummer until frost. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Queen Charlotte. Rich pomegranate-red flowers bordered with golden yellow. Height 3½ feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Wintzer's Colossal. Remarkable for its exceptionally large, broad-petaled flowers, often measuring 8 inches across. Deep scarlet with light green foliage. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Yellow King Humbert. A large-flowered yellow variety, popular for tall beds. Flowers deep yellow, blotched with red; leaves dark green. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Hardy Lilies

Showy garden flowers of the utmost beauty and stateliness, which are enormously popular just now. Plant them 6 to 8 inches deep and as early as possible in well-drained unfertilized soil, and let them alone.

Auratum (Gold-banded Lily). White flowers of enormous size with crimson spots and golden stripes produced in August. 35 cts. each, \$3.50 per doz.

Henryi. The flower-stalk, 3 to 5 feet high, carries numerous flowers, each a rich apricot-yellow spotted with brown. 35 cts. each, \$3.50 per doz.

Regale (The Royal Lily). Enormous, trumpet-shaped flowers, with waxen white



Lilium auratum

petals suffused with gold inside and stained with purple outside; fragrant. It is very hardy and does well in almost any situation, growing 2 to 4 feet high and bearing its blooms in a whorl at the top. 35 cts. each, \$3.50 per doz.

Speciosum album. Pure white. 35 cts. each, \$3.50 per doz.

Speciosum rubrum. White, shaded with deep rose and spotted red. 35 cts. each, \$3.50 per doz.

Tigrinum splendens (Tiger Lily). A larger and more prolific flowering form of the old-fashioned Tiger Lily. It grows 4 to 6 feet tall, bearing an immense cluster of showy orange-red and brown flowers, which last for weeks. Very easy to grow, and increases year by year in beauty and size. 25 cts. each, \$2.50 per doz.



Pond and Marsh Plants

Hardy Water-Lilies

	Each ppd.
Blue Beauty. (Tropical.) Day blooming. Glorious rich blue.	\$2 50
Chromatella. Rich canary-yellow.	2 00
Comanche. Sunset shade.	2 25
General Pershing. Day blooming. Light pink.	1 75
Gladstone. Pure white; large.	1 75
Gloriosa. Red. Very free bloomer.	2 50
Helen Fowler. Deep pink.	1 50
Panama-Pacific. (Tropical.) Day blooming. Purple.	2 50

Marsh- or Bog-Plants

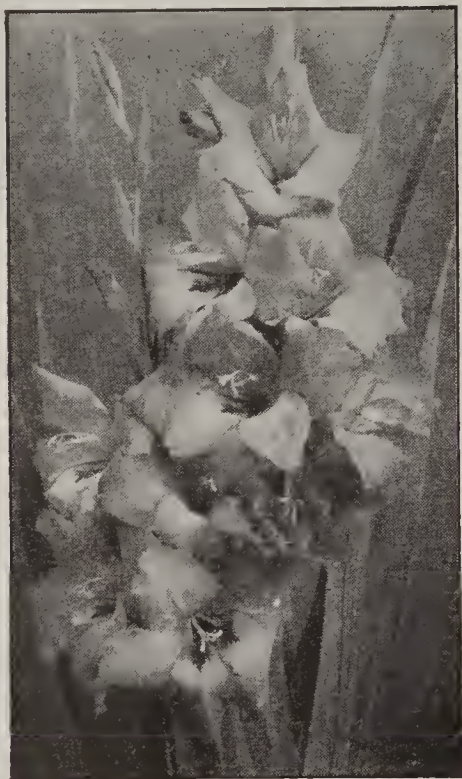
Blue Flag.	\$1.00 for 3
Giant Arrowhead. . . . . .	.50 for 3
Graceful Cattail. . . . . .	.50 for 2
Parrot Feather. . . . . .	.25 for 2
Pickrel Rush. . . . . .	.50 for 3
Primrose Creeper. . . . . .	.50 for 3
Umbrella Palm.	1.00 for 3
Variegated Sweet Flag.	1.00 for 3
Water Hyacinth. . . . . .	.50 for 3
Water Poppy. . . . . .	.50 for 3
Yellow Flag.	1.00 for 3

GLADIOLUS

Few Flowers are more lovely or easier to grow

There are few flowers to compare with the Gladiolus for all-round usefulness in the home-garden—and few flowers are more lovely or easier to grow. Their graceful form, attractive colors, and characteristic markings have given them the popular name of "Garden Orchids." Plant the bulbs any time after mid-April up to the end of June, setting them about 4 inches deep and 6 inches apart. For a constant supply of flowers for cutting from August to frost, make plantings every week or ten days during the spring. The varieties we offer are the choicest in their color-range, and you will not be disappointed by any of them. Our bulbs average 1½ inches and over in diameter, which is considered the very best flowering size.

5 cts. each, 50 cts. per doz., \$3.50 per 100, except as noted



Gladiolus

Baron Hulot. Deep indigo-blue; not large, but there is nothing better in this color. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Betty Nuthall. Flower-spikes long and graceful. Warm coral-pink, with pale orange throat. 7 cts. each, 75 cts. per doz., \$5 per 100.

Byron L. Smith. Delicate orchid-lavender, deepest at the edges of the petals and shading toward white in the center. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Captain Boynton. Beautiful lavender, with deeper blotch on lower petals. An excellent variety.

Charles Dickens. Purple-violet. A very good grower and choice variety. 8 cts. each, 85 cts. per doz., \$6 per 100.

Crimson Glow. Glowing, velvety crimson, shaded deeper in the center. Tall, strong grower.

Dr. F. E. Bennett. Peach-red, overlaid with flame-scarlet; throat speckled ruby and creamy white. Sturdy grower. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Evelyn Kirtland. Very warm rose-pink, deeper at the edges of the petals, shading towards shell-pink in the center; brilliant scarlet blotches on the lower petals.

Geraldine Farrar. Beautiful pale lavender-blue, with deep violet spot on lower petals. 8 cts. each, 85 cts. per doz., \$6 per 100.

Giant Nymph. Light rose-pink, with creamy yellow throat. Grows 6 feet tall.

Gloriana. Finest golden salmon, with pure yellow throat. Very free blooming. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Gold Eagle. Pure, bright yellow. Bears up to 15 florets on the spike. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Golden Dream. Pure golden yellow. One of the leading yellow varieties for cut-flowers. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Golden Measure. Pure golden yellow. Very large flowers of good substance.

Halley. Salmon-pink with creamy yellow blotch on lower petals. Very early.

Herbstzauber. Beautiful warm salmon-copper. Tall; late flowering. 8 cts. each, 85 cts. per doz., \$6 per 100.

Illuminator. Brilliant carmine-red with a very faint suffusion of blue. Will resist the hottest sun; extra-fine for cutting. 7 cts. each, 75 cts. per doz., \$5 per 100.

Longfellow. Clear La France-pink. Tall, slender, wiry spike of large, wide-open flowers. 8 cts. each, 85 cts. per doz., \$6 per 100.

Los Angeles. Beautiful shrimp-pink, glowing orange-carmine blotch in throat. Good forcing variety.

Marmora. Lavender-gray, with petunia-colored blotch. Ten to twelve very large flowers open at once. 8 cts. each, 85 cts. per doz., \$6 per 100.

Mary Pickford. Lovely creamy white with soft sulphur-yellow throat.

Minuet. Beautiful clear, light lavender. This is the lavender by which all other lavenders are judged. 8 cts. each, 85 cts. per doz., \$6 per 100.

Miss Spokane. Large, brilliant salmon-orange flowers, with conspicuous salmon blotch. Midseason. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Mother Machree. Large, smoky lavender flowers, the result of a blending of lavender and orange, subdued with neutral gray. Very beautiful but hard to describe. 10 cts. each, \$1 per doz., \$7 per 100.

Mr. W. H. Phipps. La France-pink, overlaid with salmon-rose. Enormous flowers. A real Super Glad. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Mrs. Dr. Norton. Silvery white base, tinged with pink. Splendid cut-flower.

Mrs. Francis King. Flame-red, shaded salmon toward throat. Very tall, strong spike.

Mrs. Frank Pendleton. Deep rose-pink, shading to pale pink in throat; large, bright crimson blotches on lower petals.

Mrs. H. E. Bothin. Geranium-pink, tinted salmon; flaming scarlet center. A leader.

Mrs. Leon Douglas. Begonia-rose, striped with flame-scarlet; lower petal pale lemon, speckled ruby. Considered one of the largest Glads in existence.

Mrs. P. W. Sisson. Very handsome pale salmon-pink variety of a most soft and appealing shade. Highly regarded as a cut-flower by amateur growers. 8 cts. each, 85 cts. per doz., \$6 per 100.

Mrs. Van Konynenburg. Matchless aniline-blue. Without a doubt the best blue variety. Grows very tall. 8 cts. each, 85 cts. per doz., \$6 per 100.

Nancy Hanks. Rich apricot to orange-pink, with grenadine tongue. Stands the hottest sun. 7 cts. each, 75 cts. per doz., \$5 per 100.

1910 Rose. Pure deep rose-pink, with white center lines on lower petals.

Orange Queen. (Prim.) Purest apricot of a very warm tint. Considered one of the choicest Grandiflora Primulinus.

Peace. Pure white, with lilac feathering on lower petals. Good for late blooming.

Picardy. One of the best of the new "Glads." The blooms are large, slightly ruffled, and a charming apricot-pink color. 10 cts. each, \$1 per doz., \$7 per 100.

Purple Glory. Velvety maroon with almost black blotches. Large, ruffled flowers.

Red Glory. A gorgeous dark red sport of the famous Purple Glory. It is a deep, glowing color, full of fire and latent charm. Beautiful variety. 8 cts. each, 85 cts. per doz., \$6 per 100.

Rose Ash. Old-rose, overlaid and blended with pink, blue, and red, giving the color of ashes of roses, hence its name. Very attractive.

Scarlet Wonder. Pure deep scarlet. Mammoth flowers, many open at a time on tall, stiff stems. 6 cts. each, 65 cts. per doz., \$4.50 per 100.

Souvenir. (Prim.) Pure golden yellow. Typically hooded flowers.

Tyrian Beauty. Pure Tyrian-rose, upper petals a shade lighter. Very attractive. 7 cts. each, 75 cts. per doz., \$5 per 100.

Virginia. Large, massive, flaming scarlet flowers, making a gorgeous display of dazzling red.

Yellow Wonder. Flowers buttercup-yellow, slightly deeper in the throat, without markings. 7 cts. each, 75 cts. per doz., \$5 per 100.

SCOTT'S EXHIBITION MIXTURE.

An excellent mixture of show or exhibition varieties in many attractive colors. It is an outstanding assortment and sure to please any lover of Gladiolus. 5 cts. each, 50 cts. per doz., \$3.50 per 100.

SCOTT'S GARDEN MIXTURE.

This mixture of standard varieties in many beautiful colors will make an excellent showing in the garden or for cut-flowers. Large, healthy bulbs, 4 cts. each, 35 cts. per doz., \$2.50 per 100.

Dahlias

It is doubtful if there are any flowers that afford as much general satisfaction as Dahlias. The ease with which they can be grown in any sunny situation, their freedom from pests and blights, their endless variety of color, size, and form, and their great usefulness for cutting as well as garden decoration insure them a permanent place in popular favor, while their low cost makes it easy for everyone to start a collection which can be added to year after year. The roots or tubers should be planted about 4 inches deep in well-dug soil during May or June. Allow at least 2 feet of space between plants. Trim out all but the strongest two or three shoots and when these are about 4 feet

high pinch off the tips to encourage branching. If extra-large exhibition blooms are wanted, remove all but one or two of the top buds on each stem. Tall plants should be tied to stakes for support. Dig roots when frost has killed the foliage in the fall, and store in sand or soil in a cool but frost-proof cellar.

The Cactus Dahlias are distinguished by narrow, quilled petals which are often curved and twisted in various forms. Decorative Dahlias include the old-fashioned formal and rather stiff show or "ball" Dahlias, and the newer broad-petaled types of enormous size.

In the following list, C indicates Cactus; D, Decorative



Jersey's Beauty

A. D. Livoni. (D.) Rich seashell-pink. 30 cts. each, \$3 per doz.

Avalon. (D.) Clear yellow. 75 cts. each, \$7.50 per doz.

Chemar's Eureka. (C.) White, slightly tinted pale mauve. 50 cts. each, \$5 per doz.

Fordhook Victory. (D.) Giant flowers of a rich shade of Tyrian rose. Marvelous flower. 50 cts. each, \$5 per doz.

Garden Glow. (C.) Orange-red and chrome-yellow. 75 cts. each, \$7.50 per doz.

Harry Mayer. (D.) A fine exhibition variety with large soft lilac flowers having rose-pink reverse. 50 cts. each, \$5 per doz.

Insulinda. (D.) Large rich bronze flowers. 50 cts. each, \$5 per doz.

Jane Cowl. (D.) A warm buff and old-gold bloom, with broad, slightly twisted or waved petals. 75 cts. each, \$7.50 per doz.

Jean Kerr. (D.) Pure white. 50 cts. each, \$5 per doz.

Jersey's Beauty. (D.) Perfect flowers of an ideal shade of pink, with long, handsome stems making it splendid for cut-flower use. A free, early bloomer with ex-

ceptional keeping qualities. 50 cts. each, \$5 per doz.

Kathleen Norris. (D.) True pink. 75 cts. each, \$7.50 per doz.

Marmion. (D.) Very large flowers on a sturdy, massive plant held well above the foliage on excellent stems. Golden yellow shading to tinges of orange. 75 cts. each, \$7.50 per doz.

Patrick O'Mara. (D.) Flowers 8 inches or more in diameter, and borne on long, stiff stems. They are firmly set at right angles, close to stem. Soft and pleasing shade of orange-buff, slightly tinged with Neyron rose. 50 cts. each, \$5 per doz.

Quota. (D.) A clear, clean white of very good quality. Long, stiff stems. 50 cts. each, \$5 per doz.

Red Planet. (D.) Attractive cerise-red, suffused yellow. Fine for exhibition and garden. 50 cts. each, \$5 per doz.

Sagamore. (D.) This is a wonderful commercial and exhibition variety with good keeping qualities and of uniform large size. Color, amber-gold, shaded with a warm salmon-rose and orange-buff. An open, strong grower with erect stems. 50 cts. each, \$5 per doz.

Prices given are postpaid. Half-dozen roots, any assortment of varieties, at dozen rates

Peonies

Peonies are among the most gorgeous plants that can be grown in a garden. Given a deep, rich soil and a sunny situation they will thrive anywhere. A mulch of manure each fall will help to maintain them. Plant the roots so that the eyes will be about

½ inch below the surface of the ground. Strong divisions with 3 to 5 eyes, and plenty of roots, and larger size than usually offered.

Price, 50 cts. each, \$5 per doz., except where noted

Alexandre Dumas. Creamy white collar with light violet-rose crown. Blooms early and freely and is of medium height.

Augustin d'Hour. A brilliant dark red with a silvery reflex. Medium tall plant blooming freely in midseason.

Avalanche. Milk-white with a cream-white collar and center of lilac-white; carmine spots mark the petals.

Charles McKellip. Bright crimson. Blooms are full double and carried very freely during midseason.

Felix Crousse. Flame-red. Large, bomb-shaped. Late midseason.

Festiva Maxima. White; very large, globular. Still one of the best. Early.

Germaine Bigot. Very large, compact blooms. Pale lilac-rose with center petals flecked crimson. Midseason.

Karl Rosenfield. Dark crimson, very brilliant and striking in color. Blooms are of semi-rose type. Midseason.

Marie Crousse. Globe-shaped blooms rather loose in form. Color pale lilac-rose. Plants tall and free blooming. Midseason.

Mme. Ducl. Light mauve-rose with a silvery reflex. Globe-shaped blooms, slightly fragrant. An extra-fine variety.

Mons. Jules Elie. A large flower with a high crown. Color pale lilac-rose, with an amber-yellow collar; fragrant. Early.

President Roosevelt. Deep, rich, brilliant red. Blooms semi-rose type, opening midseason. 75 cts. each.

President Taft. Bold, handsome, flat, pink flower. Midseason. 75 cts. each.

Primevere. Guard petals creamy white, center petals light sulphury yellow. The nearest approach to yellow in a Chinese Peony group. Midseason. 75 cts. each.

Princess Beatrice. Guard and crown petals violet-rose; collar creamy white with crimson flecks. An extra-good variety blooming in midseason.

PEONIES BY COLOR. Strong-growing plants of selected varieties. Named to color, red, white, or pink. 25 cts. each, \$2.50 per doz.

Peony roots are sent postpaid at prices here given



President Roosevelt Peonies



The Queen of Flowers

The Rose has been for thousands of years the queen of flowers, and no garden can be complete without representatives of the different types of these lovely flowers. We list here only the best varieties of the different classes of Roses, in a quality of plant which will give the best service to our customer.

For exhibition and cut-flower purposes, the Hybrid Teas are

unsurpassed. For a sheer mass of color in the garden there is nothing like the Polyanthas. The Hybrid Perpetuals will give you quantities of large, fragrant flowers in June. Climbing Roses can serve many purposes, and every garden should have a few of the old Moss Roses and that splendid shrub Rose, *Rosa Hugonis*.

Hybrid Tea Roses

These popular flowers are crosses between the fragrant and hardy Hybrid Perpetuals and the old tender Tea Roses. They give quantities of bloom of cut-flower quality on plants which are hardy with a little protection during the winter.

They begin blooming in late May or early June, depending on the locality, and if given plenty of water, occasional applications of fertilizer, and are kept sprayed or dusted so that the foliage is free of disease or insects, will bloom practically continuously until stopped by frosts. Book of Rose culture free with every order when requested.

All of the Roses we offer are No. 1 grade, 2-year-old, hardy, northern field-grown plants.

Alezane. Plant Patent No. 116. A reddish brown bud opens into a rich apricot bloom, veined with yellow. A very

interesting color which has attracted a great deal of attention. A vigorous, upright grower with dark green foliage. Starts blooming very early. \$1.50 each.

Amelia Earhart. Plant Patent No. 63. Large, long-pointed buds and very large, well-formed flowers of golden yellow, deeper at center, with orange sheen; very fragrant. Long, strong stems. Continuous bloomer. A Gold Medal Rose. \$1.25 each.

Ami Quinard. One of the darkest Roses in existence. Velvety crimson-maroon with a soft black luster. Averages 17 petals. Carries the real old Rose fragrance. Strong-growing plants. \$1 each.

Better Times. Plant Patent No. 23. Very large, double, high-centered flower of brilliant cerise on strong stem; bud long-pointed. Foliage leathery, dark green. Very vigorous; profuse, continuous bloomer. \$1.25 each.

Briarcliff. A nice sport of Columbia. One of the best varieties for cut-flowers. Color is a nice clean shade of rose-pink. Flowers are perfectly formed and very fragrant. 75 cts. each.

Caledonia. One of the finest white Roses. Long-pointed buds and very double, high-centered, pure white flowers. Moderately fragrant. 75 cts. each.

Carillon. Plant Patent No. 136. Orange-scarlet buds contrast strongly with the green sepals. The bud opens into an extra-large bloom often 4 inches across; color is deep coral, overcast with orange. The bush branches freely and carries many of the colorful flowers. \$1.25 each.

Cathrine Kordes. A nicely formed, high-centered Rose of scarlet-red. The plants are very strong, and unusually free-blooming. \$1 each.

Countess Vandal. Plant Patent No. 38. Stunning new Rose of coppery pink, strongly tinted with ruddy shades in the bud, opening to big, handsomely shaped flowers of striking color. \$1 each.

Crimson Glory. Plant Patent No. 105. The finest red Rose since Etoile de Hollande. Large, double blooms of vivid crimson shaded deep red, mellowed by a soft velvety nap. Wonderful perfume. Branching plants of medium height. \$1.25 each.

Dame Edith Helen. One of the most remarkable Roses in the world for its giant size, multiplicity of well-placed petals, and its sparkling, pure pink color. Very handsome and in great demand. 85 cts. each.

Dotty. Deep golden yellow buds opening into blooms that are a clear sunflower-yellow. The flowers are fragrant, well shaped, and remain in good condition for several days. 75 cts. each.

Eclipse. Plant Patent No. 172. The longest, slenderest yellow bud to be found among garden Roses. Open flowers are large, loosely formed, of rich golden yellow without shading. Plants are quite tall and bushy and bloom freely. This Rose will be popular for its buds alone. \$1.50 each.

E. G. Hill. Gorgeous dark crimson-scarlet blooms full of delicately curled petals; intensely fragrant. Plants grow well and produce an unusual number of splendid flowers. 65 cts. each.



Rose, Briarcliff



Rose, Golden Dawn

Essence. A new Rose that is distinguished both by its fragrance and its brilliant crimson color. The blooms are fully double and carried very freely on a healthy, vigorous plant. 75 cts. each.

Etoile de Hollande. The best red Rose for garden use. Its flowers are gigantic, beautifully frilled, fragrant, and the color is deep, glowing crimson which does not fade. 85 cts. each.

Feu Pernet-Ducher. Plant Patent No. 103. One of the most beautiful of the yellow Roses, having perfect form and a large number of petals. At times the outside petals are almost white, but the heart of the flower is a rich golden yellow. Blooms continuously. \$1.50 each.

Gaiety. A bicolored, nicely formed Rose of orange, Indian red, and silver. Long stems for cutting. 85 cts. each.

Gloaming. Plant Patent No. 137. Lovely cut-flower quality blooms of a warm shade of salmon-pink. Flowers are large. Plant is very strong and blooms freely throughout the season. \$1.50 each.

Golden Dawn. One of the best garden Roses, with large, very double and very fragrant flowers of pale straw-yellow. The plants are low but spreading, with beautiful foliage. 85 cts. each.

Goldenes Mainz. Plant Patent applied for. The deepest yellow of all the garden Roses. The rich dandelion-yellow flowers are quite large, loosely formed, but produced in amazing quantities. Plants are tall and branching. \$1.50 each.

Gruss an Teplitz. One of the most useful and dependable Roses. Beautiful, clear crimson-scarlet, fragrant flowers, profusely borne till frost. Most desirable for bedding and a good hedge. 65 cts. each.

Hinrich Gaede. Probably the most spectacular of all the "fancy" Roses. Blooms are burnt-orange with vermilion tints, and they retain their coloring better than most of this type. Plants are bushy, with beautiful foliage, and bloom very freely. \$1.25 each.

Joanna Hill. Well-shaped flowers of creamy yellow, stained with brownish gold on outside of petals and deep yellow within. Fine cut-flower variety. 75 cts. each.



Rose, Mrs. Sam McGredy

Leonard Barron. Very large, saucer-shaped flowers with about a hundred petals. Color is salmon, pink, and amber. Red cedar scent. Low-growing plants. \$1 each.

Margaret McGredy. A cup-shaped bud opens into a vivid scarlet bloom which later turns to brick-red or scarlet-orange. A desirable double variety. 75 cts. each.

Mary Hart. Plant Patent No. 8. A deep Indian red sport of the famous Talisman. Remarkable for its rich oxblood hue, and rare metallic sheen from its underlying golden yellow ground-color. Remarkably free flowering. \$1 each.

Matador. Plant Patent No. 170. The blooms are large, well formed, scarlet-crimson with darker sheen on the reverse of the petals. \$1.50 each.

Max Krause. New golden yellow Rose of great depth and substance, originated in Germany where it has won many honors at flower shows. Blooms freely on long stems. \$1 each.

McGredy's Scarlet. An excellent garden Rose which is a nice shade of red, instead of scarlet, as the name would indicate. Flowers are freely produced on very vigorous, healthy plants. \$1 each.

McGredy's Triumph. Plant Patent No. 190. Bright carmine with shades of gold which deepen toward the base of petals. Blooms are large and full. \$1.50 each.

Miss Rowena Thom. A descendant of Radiance and Los Angeles, with gigantic, globular blooms of glowing pink tinged with gold at the base. A prolific grower and always in bloom. 75 cts. each.

Mme. Jules Bouche. Pure white, medium-sized blooms that are very beautiful. Plants grow rather tall, branch freely, and carry many flowers. 85 cts. each.

Mrs. Erskine Pembroke Thom. Best of the clear unshaded yellow Roses. Flowers well shaped, of medium size, and richly yellow. Fine foliage and growth vigorous. Free flowering. 85 cts. each.

Mrs. Pierre S. du Pont. A deep yellow Rose that shows no signs of fading. Full double but with only little fragrance. 75 cts. each.

Mrs. Sam McGredy. A Gold Medal winner from the north of Ireland, with astonishing buds and flowers of glowing orange-salmon and coppery gold. One of the best of the new varieties. \$1 each.

Otto Krauss. Large, coppery yellow flowers, slightly fragrant. Very vigorous; profuse bloomer. \$1 each.

President Herbert Hoover. Enormous flowers of ever-changing color. Deep copper-red in bud, golden in the center, with deep pink outer petals. In autumn it is superb. Plants very strong, with good foliage, blooming early and often. 85 cts. each.

Prince Felix (de Luxembourg). A huge flower of brilliant scarlet-red and fine form. Tall, healthy plant of unusual hardiness. 85 cts. each.



Rose, Texas Centennial

Radiance. Large, strongly fragrant, light silvery pink to salmon-pink flowers, borne profusely all summer on long, strong stems. 75 cts. each.

Radiant Beauty. Plant Patent No. 97. A sport of Francis Scott Key with fewer petals, so that it opens well at all times. Color is a peculiar red, the petals having a metallic luster. \$1.50 each.

Red Radiance. A sport of Radiance and equally good, differing only in the beautiful deep red color of the large globular flowers. Very hardy and of the greatest garden value. Fine fragrance. 75 cts. each.

Roslyn. Remarkable for the large size and perfect form of its clear sunflower-yellow blooms. Plant grows well and produces perfect flowers. 65 cts. each.

Schwabenland. Extra-large, spirally formed blooms of amaranth-pink. Moderately fragrant. Upright, continuous-blooming plants. 85 cts. each.

Signora. Plant Patent No. 201. A great new Rose of fine form on long stems. Deep orange, heavily veined carmine, edges of petals brick-orange. Fruit fragrance. 45 petals. \$2 each.

Talisman. The most remarkable color yet produced in Roses—brilliant scarlet, shaded rose on one side of the petal and glowing golden yellow on the other, giving a startling red and yellow effect. Has long stems, and is always in bloom. 65 cts. each.

Texas Centennial. Plant Patent No. 162. A sport of President Herbert Hoover, exactly like its parent in plant and shape of flower. The color, however, is vermilion-red with a touch of gold at the base of the petals. Flowers age a deep shade of pink. \$1 each.

White Briarcliff. Plant Patent No. 108. A superb white Rose, glistening in its purity. The plants branch freely and continue to bloom during the whole summer. The best white Hybrid Tea Rose for general garden purposes. \$1.50 each.

Willowmere. Large, double flowers of rich shrimp-pink, shaded yellow at the center. Low, spreading growth. A lovely old variety. 75 cts. each.

QUANTITY PRICES. All 65-ct. varieties, \$6.50 per doz.; 75-ct. varieties, \$7.50 per doz.; 85-ct. varieties, \$8.50 per doz.; \$1 varieties, \$10 per doz. Half-dozen plants, any assortment of varieties, at dozen rates. *These prices do not apply to patented Roses.*



Rose, Doubloons

Climbing Roses

The modern Climbing Rose is one of the most adaptable and most satisfactory flowering plants that we have in our gardens. There are so many types to choose from, from the lovely old Ramblers which when in bloom are one mass of thousands of beautiful flowers, to the very latest large-flowered climbers, with blooms of cut-flower quality; in fact, many of them have larger and better formed flowers than those to be found on the dwarf plants. For covering trellises, arches, fences, walls, or sides of buildings, they are unsurpassed.

Blaze. Plant Patent No. 10. The blazing red blooms are produced in clusters for several weeks during the Rose season, and a second crop of flowers may be expected before freezing weather arrives. \$1 each.

Climbing American Beauty. Moderately fragrant, rich rosy carmine, 3 to 4-inch blooms on long stems, profusely borne by a very vigorous, hardy plant. 65 cts. each.

Mary Wallace. A vigorous climber with large, very bright pink flowers suffused with gold; double, cup-shaped, and fragrant. Glossy, rich green foliage. Grows 8 to 12 feet high and blooms profusely in June. 75 cts. each.

Doubloons. Plant Patent No. 152. A new and exceedingly handsome yellow Climbing Rose. It was developed from the native Prairie Rose, which makes it much hardier than any other yellow climber. \$1.50 each.

Dr. W. Van Fleet. Perfectly formed long, deep pink buds on long stems, with several in a cluster, each expanding to about 4 inches. A vigorous grower. Bears hundreds of delicately perfumed blooms that make good cut-flowers. 65 cts. each.

Laure Soupert. Most interesting hardy pillar or climber of the Rambler type. White with a faint blush. Covered all season with very fragrant blooms. A new and unique everblooming Rambler. \$1 each.

Mercedes Gallart. A very free-blooming variety, producing quantities of fragrant, cerise-red blooms during the greater part of the summer. Its long stems make it very desirable for cutting. \$1 each.

New Dawn. Plant Patent No. 1. Many tests in severe climates show this variety is about the hardiest of all Climbing Roses. The blooms are produced as freely as on most Hybrid Tea Roses, and you may expect hundreds of flowers from the opening of the season in June until cold weather closes the season of flowers. The color of the bloom is a delicate blush-pink, and long stems make the clusters desirable for interior decorations. Foliage is dark green and glossy. \$1.50 each.

Paul's Scarlet Climber. The purest red of all the pillar Roses. Clusters of semi-double, vivid scarlet flowers shaded crimson, that retain their color till they fall. Not a very tall climber but hardy and floriferous. 75 cts. each.

Princess van Orange. Plant Patent No. 106. This is a climbing sport of Gloria Mundi and reaches 6 feet in height. When in bloom it is simply covered with masses of blazing red flowers in clusters. One of the best of the recent introductions. \$1 each.

Silver Moon. Immense, semi-double, pure white blooms 4 inches across, intensified by golden yellow stamens, are borne on long, stiff stems. A wonderful Rose. 65 cts. each.

Polyantha Roses

These dwarf Roses are becoming more popular every year for garden decoration because they produce an abundance of bloom all season. The plants average 18 inches in height and are especially valuable for a hedge or border or for massing for spectacular decorative effect.

Price, 65 cts. each, except where noted

Cameo. A sport of Orleans Rose with semi-double, salmon-pink flowers in clusters. These age shell-pink. Grows 15 to 18 inches tall; bushy.

Else Poulsen. Medium-sized, semi-double flowers of bright rose-red. Plants 3 to 4 feet tall, bushy and very hardy.

Gloria Mundi. Vivid orange-scarlet. Free flowering.

Miss Edith Cavell. Large clusters of small, semi-double, brilliant scarlet-red flowers, shaded darker.

Permanent Wave. Plant Patent No. 107. Blooms are large, semi-double, fragrant, and carried in clusters on long stems. The color is a brilliant carmine. Received the Bagatelle Gold Medal for general excellence. \$1 each.

Yvonne Rabier. Clusters of small, pure white flowers with creamy bases.

Hybrid Perpetual Roses

These, because of their wealth of bloom, named June as the month of Roses. They are much hardier, stronger growing plants than the Hybrid Teas and bear an immense crop of bloom in June.

Price, 65 cts. each

American Beauty. A very popular cerise-red variety.

Frau Karl Druschki. An immense, pure white, perfectly double Rose, sometimes nearly 6 inches in diameter, abundantly produced in June.

General Jacqueminot. A very popular old Rose known to everybody as the "Jack" Rose. Rich crimson, deliciously fragrant.

S. M. Gustave V. Long-pointed, brilliant crimson bud and very large, semi-double, fragrant, cochineal-carmine flower, with crimson reflexes. Very vigorous.

Mme. Albert Barbier. Soft fawn-yellow flowers, paling to white, with pinkish shades in center; double; cupped.

Shrub Rose

Rosa Hugonis. Flowers light yellow, about 2 inches across, borne on long, slender branches. Generally in full bloom Decoration Day. 75 cts. each.

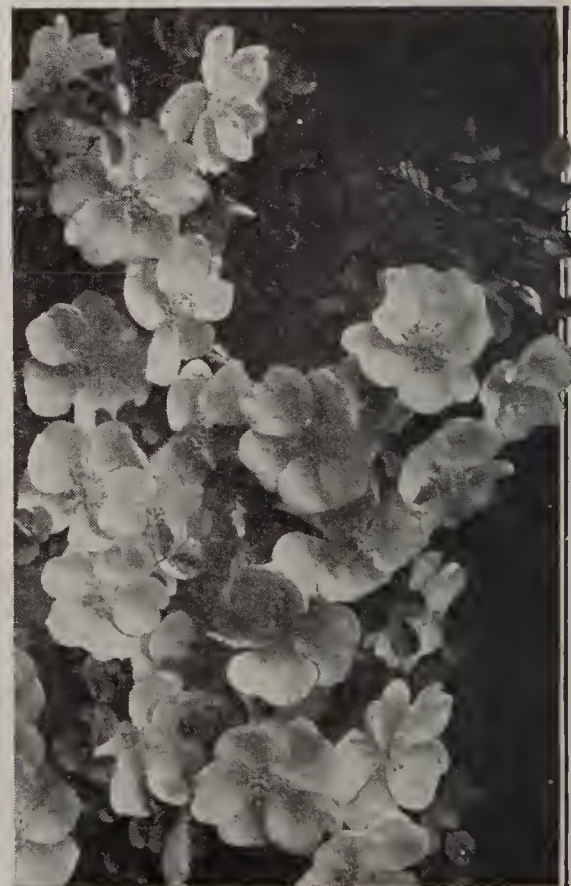
Moss Roses

A group of old-fashioned Roses of moderate growth, readily recognized by the mossy coating which surrounds the calyx of the bloom. The flowers generally are of medium size but very attractive.

Price, 75 cts. each

Henri Martin. Blooms semi-double and a brilliant crimson color.

Crested Moss. Beautifully mossed pink buds and double pink flowers freely produced on fine healthy plants.



Rosa Hugonis



Clematis



Wisteria



Silver Lace Vine

VINES

Well-placed vines make a wonderful addition to the looks of the home or garden. By softening the sharp corners of the buildings and porches, they add a charm not otherwise obtainable. Vine-draped trees and pergolas have a peculiarly appealing grace not easily described, and some of the vines are particularly valuable in covering banks. The following are highly desirable vines. They are all strong, 2-year-old No. 1, field-grown plants, with good root-systems, except Cinnamon Vine and Madeira Vine which are roots.

BITTERSWEET (*Celastrus scandens*). Bold vine with large foliage hung in autumn with clusters of orange and yellow berries which are very decorative all winter. 50 cts. each, \$1.35 for 3.

BOSTON IVY (*Ampelopsis Veitchii*). High-climbing, clinging, deciduous vine with lustrous, three-pointed leaves 2 to 4 inches across. 50 cts. each, \$5 per doz.

CINNAMON VINE. A long-lived, vigorous climber with broad heart-shaped leaves and clusters of white, cinnamon-scented flowers. Dies down to the ground each winter but comes up again very quickly in the spring. Large roots, 10 cts. each, \$1 per doz., \$7 per 100.

CLEMATIS Jackmani. Large, flat, 5 to 6-inch, velvety purple flowers, freely produced and highly prized because of their beauty and splendor. 85 cts. each, \$2.25 for 3.

paniculata. Sweet Autumn Clematis. In August or September the plants are densely covered with fragrant white flowers, followed by seeds, each of which has a grayish, fuzzy plume which gives the plant the appearance of being in bloom until winter comes. 40 cts. each, \$1 for 3.

Mme. Edouard Andre. Large bright carmine-violet flowers. Unusual and distinct. 90 cts. each.

DUTCHMAN'S PIPE (*Aristolochia siphon*). A fast-growing vine with 6 to 15-inch broadly reniform leaves and pipe-like flowers. 2 to 3-ft. plants, \$1 each.

SCARLET TRUMPET VINE. Vigorous climber. Handsome, trumpet-shaped, reddish orange flowers in midsummer. 35 cts. each, \$1 for 3.

HONEYSUCKLE (Lonicera), Halliana. Dark green foliage with attractive, sweetly scented flowers, produced from July to frost. Desirable for trailing over fences, arbors, and as a ground-cover for banks. 35 cts. each, \$3.50 per doz.

KUDZU VINE. One of the fastest growing hardy vines. Foliage large. Small racemes of rosy purple, pea-shaped flowers in August. Fine for permanently covering verandas, dead trees, etc. 35 cts. each, \$1 for 3.

MADEIRA VINE. Rapid-growing climber that quickly covers porch, trellises, arbors, stumps, etc. Foliage light green; flowers white, small and feathery, delightfully fragrant. Plant roots in May. Large roots, 10 cts. each, 25 cts. for 3, 75 cts. per doz.

SILVER LACE VINE (*Polygonum Auberti*). Rapid climber. Light green, waxy foliage. Curious, stringy clusters of crystal-white flowers of irregular shape. 75 cts. each, \$2 for 3.

TRUMPET CREEPER (*Bignonia radicans*). The Bignonias are very useful for covering unsightly places, stumps, rockwork, or for planting in crevices in ledges. Large, attractive, scarlet flowers are borne in profusion. 35 cts. each, \$1 for 3.

VIRGINIA CREEPER (*Ampelopsis quinquefolia*). One of the best and quickest growing vines for covering trees, trellises, arbors, etc. The large deep green foliage turns yellow, crimson and scarlet in fall. 45 cts. each, \$1.25 for 3.

WISTERIA sinensis. Handsome, showy, pea-like pale blue flowers in large grape-like clusters. Well adapted for training on porches, arbors, trellises, or trees. They require a deep rich soil. Strong, 2-yr., grafted plants, 90c. each, \$2.50 for 3.

Postage extra. See page 26

HEDGE PLANTS

Hedges or living fences make the most artistic boundaries for the farm, to mark the line between highway and farm, to define the driveways or enclose the home-grounds. They add much to the value of the place. Once planted they require little attention. These are strong, thrifty, attractively shaped plants that will make desirable specimens on your lawn.

CALIFORNIA PRIVET (*Ligustrum ovalifolium*). A rapid grower with dark green foliage that persists until early winter. May be pruned to any shape. Unpruned, it assumes an upright, spreading habit, about 10 feet tall. 12 to 18-in. plants, \$1 for 25, \$3.75 per 100, \$17 for 500.

AMUR RIVER PRIVET. Like California but considerably hardier, with foliage not quite so lustrous. Fast upright grower, easily trimmed. 12 to 18-in. plants, \$2.50 for 25, \$9 per 100.

JAPANESE BARBERRY (*Berberis Thunbergii*). Compact-growing, much-branched low shrub whose many spines deter animals from breaking through. Its red berries persist until spring. 3-yr. transplanted plants, \$1.40 for 10, \$6.50 for 50, \$12 per 100.

RED-LEAVED BARBERRY (*Berberis Thunbergii atropurpurea*). Exactly like the well-known Japanese Barberry except that the foliage is rich crimson, becoming brilliant scarlet when the sun falls on it. 18 to 24-in. plants, 40 cts. each, \$4 per doz.

HARDY FLOWERING SHRUBS

There is not a farm or suburban home that cannot be greatly improved by the use of a few good flowering shrubs. There are no hard and fast rules to follow when beautifying the home-grounds, other than that vistas or views should be retained or made—not spoiled or shut out by a misplaced tree or shrub. Irregular groups or masses of shrubs should surround the buildings and follow the fences or outline the yard, with an open space for lawn. Flowering shrubs thrive on any land. Plant whenever the ground can be worked in the spring until late in May. The earlier, the better.

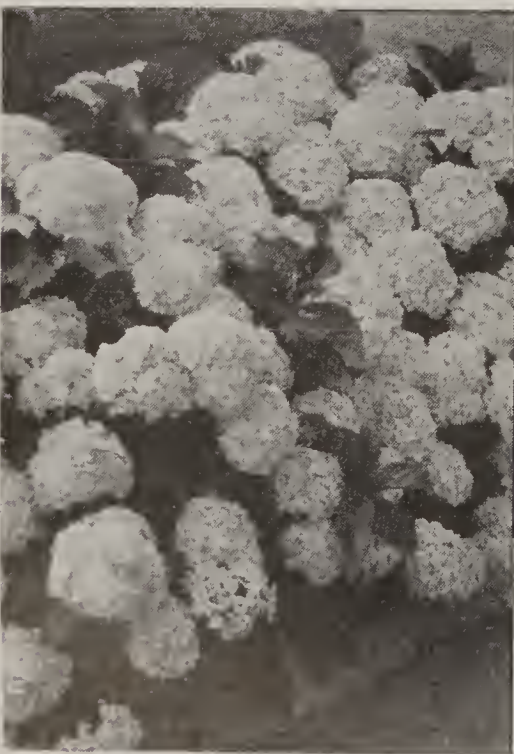
Plants by Parcel Post. Add to the prices given, 10 cts. for 1 plant, 15 cts. for 3 plants, 20 cts. for 6 plants, 30 cts. for 12 plants.



Dogwood, Florida



Azalea



Hydrangea

ALTHÆA. Rose of Sharon. A very useful shrub with large, single or double flowers in great profusion in late summer, a time when flowering shrubs are scarce.

Pink, Purple, Red, White, or Variegated. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

ALMOND, Flowering (*Amygdalus*). Pink, double fragrant flowers in May. 2 to 3 ft., 75 cts. each, \$2 for 3.

AZALEAS. These hardy Azaleas bloom with the utmost freedom, becoming solid masses of flowers at their season, and continuing in splendor for several weeks. Plant in slight shade and sheltered from severe winter.

Amœna. Brilliant reddish purple flowers completely cover every twig. Showy and hardy. Evergreen. \$2.50 each.

Hinodegiri. A sparkling red variation of Amœna, with no trace of the purple. Evergreen. \$2.50 each.

mollis. A dwarf, very bushy, deciduous variety. Flowers light yellow to apricot and deep orange. \$1.75 each.

BEAUTY BUSH. An exceedingly handsome ornamental shrub. The foliage and habit are attractive when the bush is out of flower and it is perfectly hardy. It grows 6 to 9 feet high when mature, and as much through, erect and twiggy, producing long, arching branches covered in spring with clusters of small, tubular flowers of the honeysuckle type, borne in such profusion that the bush is one cloud of delicate pink. 2 to 3 ft., 65 cts. each.

BUDDLEIA, Ile de France. A new variety with fragrant, rosy purple flowers suffused with violet, borne in spikes 6 to 9 inches long. The symmetrical bushes are 3 to 4 feet high. 60 cts. each.

BUTTERFLY BUSH (*Buddleia magnifica*). Large, deep rose-purple flowers in dense spikes from mid-August on. 40 cts. each.

CALYCANTHUS floridus. Sweet Shrub. This is the popular old-fashioned "Strawberry Shrub," with brown, sweet-scented, starry flowers, followed by pods of smooth brown seeds. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

DEUTZIA, Pride of Rochester. A very popular blush-white form, growing taller and bushier than *D. gracilis*. 2 to 3 ft., 35 cts. each, 95 cts. for 3.

gracilis. Slender Deutzia. A small shrub with slender, often arching branches covered with pure white flowers in graceful nodding racemes. Good for edging borders. 15 to 18 in., 35 cts. each, 95 cts. for 3.

DOGWOOD, Coral (*Cornus alba sibirica*). An upright shrub having bright coral-red branches with dark green leaves, pale beneath, and creamy white flowers in numerous flat-topped clusters, followed by bluish fruits. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

florida. The well-known white-flowering Dogwood. Big, spreading shrub or small tree with large white flowers in spring. Foliage turns bright scarlet in autumn. Rich red berries. \$2 each.

florida rubra. One of the loveliest flowering trees. Blooms glowing peach-blossom-pink, tinged darker. A specimen in full bloom is a magnificent spectacle. 3 to 4 ft., \$2.50 each.

FORSYTHIA. One of the very earliest shrubs to bloom and unsurpassed in splendor and brilliancy by other spring-flowering varieties. Branches are covered with golden yellow blooms in early spring.

spectabilis. Sturdy, erect bush with an unbelievable abundance of golden yellow flowers a shade or two darker yellow than any other variety. 2 to 3 ft., 60 cts. each, \$1.60 for 3.

suspensa Fortunei. A tall, willowy shrub literally covered with golden bells in early spring. 50 cts. each, \$1.35 for 3.

HONEYSUCKLE, Red Tartarian (*L. tatarica sibirica*). A bushy shrub, reaching 10 feet, with crimson flowers in June, followed by red fruits. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

White Tartarian (*L. tatarica alba*). About the same as the above except that the flowers are white. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

HYDRANGEA, Nicko. Blue Hydrangea. One of the most showy of all flowering plants. When planted in moist soil, flowers may assume a pinkish hue, but blue flowers may be assured by mixing about one-half pound of alum with each bushel of soil. 1½ to 2 ft., \$1 each.

paniculata grandiflora. Big conical trusses of white flowers that soon assume rose and bronze tones, are borne in late summer and last till frost. Severe pruning in early spring brings big trusses of bloom. 2 to 3 ft., 40 cts. each, \$1 for 3.

INDIAN CURRANT (*Symphoricarpos vulgaris*). Tall, slender shrub, with coral-red fruits. 2 to 3 ft., 35 cts. each, 95 cts. for 3.

JAPAN QUINCE (*Cydonia japonica*). Often called "Fire Bush." Scarlet and vivid pink flowers. Very early. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

KERRIA japonica flore-pleno. From June to October this shrub is a golden yellow bouquet, 4 to 5 feet high. Showy and desirable. 2 to 3 ft., 90 cts. each.

LILAC (*Syringa*). Many old Lilac bushes remain to mark an old homestead. Late in May the bush is crowned with many purple or white spikes of fragrant flowers.

Common Purple. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

Lilac. Named French varieties:

Jan van Tol. Single. Blooms in mid-season. Large trusses of pure white flowers.

Ludwig Spaeth. Deep reddish purple flowers in long clusters. Very unusual.

Othello. One of the finest dark-colored Lilacs. Flowers deep purplish red, and very fragrant.

Philemon. Single. Purple buds open into light purple flowers with pinkish edges.

Above 4 Lilacs, Bush form, 90 cts. each

MOCK ORANGE, Virginal (*Philadelphus virginalis*). A vigorous, tall grower, with very large, double-crested, pure white, sweetly scented flowers. A decided improvement over the old-fashioned Mock Orange. 2 to 3 ft., 50c. each; 3 to 4 ft., 75c. each.

RHODOTYPOS kerrioides. White Kerria. Very ornamental, medium-sized shrub with pretty foliage and large, single white flowers in late May. Black berries. 2 to 3 ft., 50 cts. each.

SNOWBERRY (*Symphoricarpos racemosus*). Small, rose-colored flowers in June and July followed by large clusters of pearly white fruit which endure into the winter. 2 to 3 ft., 35 cts. each, 95 cts. for 3.

SNOWBALL (*Viburnum opulus sterile*). The old-fashioned Snowball. A large shrub with white, ball-like clusters of flowers in May and June. Very decorative. 2 to 3 ft., 50 cts. each.

Fragrant (*V. Carlesi*). One of the newest and best Viburnums. Clusters of fragrant pink flowers appear in May. Plant grows to about 6 feet high. 1½ to 2 ft., \$1.50 each.

Japan (*V. tomentosum plicatum*). A rare and beautiful species from Japan. Large, globular, pure white flowers in May and June. The fall coloring of the foliage is especially fine. 2 to 3 ft., 65 cts. each.

SPIRÆA, Anthony Waterer. Bright rosy crimson flowers in dense corymbs produced abundantly from July till frost. Fine for facing plantings of larger shrubs or edging walks. 1 to 1½ ft., 35 cts. each, 95 cts. for 3.

Van Houttei. One of the most beautiful spring-blooming shrubs. The arching branches bend to the ground under the immense number of corymbs of small white flowers. 2 to 3 ft., 25 cts. each, 65 cts. for 3.

STEPHANANDRA flexuosa. A graceful shrub seldom more than a few feet high. Cream-colored flowers in June. This is an excellent plant for growing in the shade of other shrubs or trees. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

TAMARIX pentandra. A very distinct variety covered with sprays of delicate soft pink flowers during July and August, when few other shrubs are blooming. 2 to 3 ft., 50 cts. each.

WEIGELA, Abel Carriere. Brilliant deep pink. Blooms in May and June and again in the fall. Dark green foliage. 2 to 3 ft., 75 cts. each.

Eva Rathke. An upright shrub 5 to 6 feet high, with arching branches covered in late May with an abundance of slightly fragrant, rich reddish purple, trumpet-shaped flowers. 2 to 3 ft., 65 cts. each, \$1.75 for 3.

floribunda. Graceful shrubs to 10 feet, bearing quantities of lovely dark crimson flowers. 2 to 3 ft., 65 cts. each, \$1.75 for 3.

rosea. An attractive shrub with dark green foliage and trumpet-shaped, slightly fragrant, rose-colored flowers. 2 to 3 ft., 35 cts. each, 95 cts. for 3.

Variegated. Finely variegated foliage. Rose-colored flowers in June. 1½ to 2 ft., 35 cts. each, 95 cts. for 3.

Ornamental and Shade Trees

CATALPA Bungei. Umbrella-shaped trees on straight trunks. Heart-shaped leaves. Good for formal effects. 5 to 6 ft., \$1.50 each.

VASE ELM. A type developed from the American Elm. Largely used for street planting but also desirable for the home-grounds. 8 to 10 ft., \$1.50 ea.

CRAB, Bechtel's Double-flowering (*Malus*). Delicate pink blossoms in the spring and handsome fruits in the fall, which are attractive to the birds. 3 to 4 ft., 90 cts. each.

JAPANESE CHERRY. Spring-flowering, bearing a profusion of pink and white blossoms of exquisite effect. Most popular ornamental. 3 to 4 ft., \$1.50 ea.

LOMBARDY POPLAR. Slender, erect trees, planted for landscape effect and screens. 8 to 10 ft., 75 cts. each.

MULBERRY, Teas' Weeping. Round-headed tree with drooping branches; resembles an open umbrella. 2-yr. heads, 5 to 6-ft. stem, \$1.75 each.

ORIENTAL PLANE (*Platanus orientalis*). Useful and ornamental for street and specimen planting. Bright green foliage. 8 to 10 ft., \$1.75 each.

PLUM, Red-leaf (*Prunus Cistena*). This little tree has deep purple leaves which retain their color until fall. In the spring it is covered with fine deep pink flowers and is very attractive. 4 to 5 ft., 75 cts. each.

SILVER MAPLE. Noble 80-foot shade tree with dense branches and beautiful pointed foliage silvery on the under side. 8 to 10 ft., 90 cts. each.

WILLOW (*Salix babylonica*). The Weeping Willow is our most graceful tree for moist ground, especially fine near a pool or brook. 6 to 8 ft., \$1.75 each.



Mock Orange, Virginal



Weigela, Abel Carriere



Crab, Bechtel's Double-flowering

Rock-Garden and Hardy Perennial Plants

Hardy perennial flowers are depended on to give the garden continuity from year to year and to afford that appearance of settled contentment and quietude which comes with their increased size and reappearance in the same places year after year.

If the ground is well prepared by deep spading and fertilizing, they will need little attention beyond keeping the surface hoed and the weeds pulled for the first year—after that they are usually big and strong enough to take care of themselves.

One of the fine things about a rock-garden is that each pocket of soil can be made up to suit the particular plant you want there. In this way one can have rare treasures that would not live in an ordinary garden.

Price, 25 cts. each, 65 cts. for 3, \$2.50 per doz., except where otherwise noted. If wanted by Parcel Post, add 10 cts. extra for each plant, 15 cts. for 3, 35 cts. per doz.

Varieties marked **R** suitable for Rock-Gardens



Aquilegia (Columbine)



Arabis alpina



Dianthus barbatus

AQUILEGIA (Columbine), Mixed Hybrids. Wonderful colors; very long-spurred flowers.

ARABIS alpina. Rock Cress. White flowers borne in dense masses. They are easily grown and bloom in early spring.

ARMERIA Lauchena rosea. Thrift; **R** Sea Plant. Bright rosy red. Grows 3 to 6 inches high. Blooms May and June.

BELLIS perennis. Double Daisy. Low-growing, spring-flowering, semi-hardy perennial that is good for shady places. White, Pink, and Red.

CAMPANULA calycanthema. Cup-and-Saucer. Large, double flowers resembling a cup and saucer. Mixed colors.

R carpatica. Bellflower. Blue. A pretty species grown in compact tufts not exceeding 8 inches.

Medium. Single Canterbury Bells. Mixed colors.

CARNATION, Hardy Border. A good hardy strain for outdoor culture. Flowers in a great variety of colors are borne from May to October.

CENTAUREA montana. Hardy Cornflower. Grows 2 feet high. Violet-blue flowers from July to September.

CERASTIUM tomentosum. Snow-in-Summer. A low-growing plant having silvery white foliage; an abundance of snow-white flowers.

CHEIRANTHUS Allioni. The Siberian **R** Wallflower is a biennial and grows about 18 inches high. The small, vividly orange flowers are among the showiest things in nature.

CHRYSANTHEMUMS, Hardy. Bloom after other flowers have gone.

Bronze, Pink, Red, White, Yellow.

COREOPSIS grandiflora. Tickseed. Bright yellow single flowers on long, branching stems. Will bloom all summer if flowers are kept cut.

DAPHNE Cneorum. Garland Flower. **R** Unusually attractive, dwarf, bushy evergreen plant bearing bright pink flowers at tip of every branch during May and August. 7 to 9 inches. 75 cts. each, \$7.50 per doz.

DELPHINIUM, Gold Medal Hybrids. Hardy Larkspur. Very long spikes of the choicest colors.

Wrexham Hollyhock-flowered Strain. New giant-flowered strain of superior quality. Flowers come in blue, white, and pink combinations—many of them bicolor.

Belladonna. Light sky-blue.

Bellamosa. Dark blue.

DIANTHUS barbatus. Hardy Sweet William. Large heads of red, white, and pink flowers in early summer.

R deltoides rosea. A beautiful little plant with narrow leaves bearing a profusion of small crimson flowers.

plumarius. Hardy Pinks. Low growing, grass-like foliage; flowers clove-scented; wide range of colors.

DICENTRA spectabilis. Bleeding-Heart. An old-fashioned favorite. Its long racemes of graceful, heart-shaped pink flowers are always attractive. 50 cts. each, \$1.35 for 3.

eximia. Finely cut foliage and showy racemes of pretty pink flowers. 50 cts. each, \$1.35 for 3.

DIGITALIS. Foxglove. Spikes of tubular flowers in mixed colors, White, Rose, and Purple.

GAILLARDIA grandiflora, Mixed. Blanket Flower. Large orange-yellow, scarlet, and crimson flowers in profusion. Very valuable for cutting.

GEUM (Avens), Mrs. Bradshaw. A **R** splendid new variety with large, double flowers of fiery red.

Lady Stratheden. New. Double; rich golden yellow.

GYPSOPHILA. Baby's Breath. Small white flowers on branched stems so thick as to give the plant a white lace-like effect. Excellent for cut-flowers.

Bristol Fairy. Double pearly white flowers larger than the old-fashioned type, and produced abundantly all season. Very lovely for cutting. 50 cts. each, \$1.35 for 3.

HEUCHERA sanguinea. Coral Bells. Bright crimson flowers from June to September. Very free flowering.

HIBISCUS. Marsh Mallow. Strong, almost shrubby plants with gigantic red flowers.

HOLLYHOCKS, Double Mixed (*Althæa rosea*). Bold, spire-like stalks of bloom varying from red to white, also yellow.

IBERIS gibraltarica. Hardy Candytuft. **R** Compact; lilac flowers.

sempervirens. Pure white flowers in spring. Dark glossy evergreen leaves. Fine edging plant.

IRIS, German. Flag. Superbly colored varieties of this popular garden plant. 20 cts. each, 3 for 50 cts., \$1.75 per doz.

Japanese. White, gold, or blue flowers—very attractive. 30 cts. each, 85 cts. for 3.

Siberian. A free-blooming Iris with graceful blue or white flowers in June.

ROCK-GARDEN AND HARDY PERENNIAL PLANTS, continued

LILY-OF-THE-VALLEY. A dainty plant for shady places. Fragrant, bell-like, white flowers in May. A good ground-cover.

LINUM. Flax. A desirable plant for border or rockery, growing 2 feet high. Light, graceful foliage and large flowers all summer.

LUPINUS polyphyllus, Mixed. Grows 2½ to 3 feet tall and produces White, Pink, or Lavender-Blue flowers.

MYOSOTIS palustris. Forget-me-not. **R** A lovely dwarf plant for damp places. Spreads rapidly and carpets the ground.

PAPAVER alpinum. Silky orange-yellow flowers on slender stems 15 inches high. Very bright and pretty.

nudicaule. Iceland Poppy. Grows 1 foot high, with very pretty single, crinkled flowers in White, Salmon, Yellow, or Orange.

Papaver orientale. Oriental Poppy. Immense, single, bright scarlet flowers in spring.

orientale, Mrs. Perry. Orange-apricot. The best of all the pink Poppies.

PHLOX. A universal favorite and the most showy of garden plants. They grow 2 to 3 feet high, according to variety, and have large heads of bloom. Thrive in a cool, moist, well-drained soil.

B. Comte. Dark red.

Beacon. Brilliant cherry-red.

E. I. Farrington. Beautiful salmon-pink.

Enchantress. Salmon-pink.

Ethel Pritchard. Lavender-blue.

Feuerbrand. Brilliant vermilion-scarlet.

George Stipp. Carmine with violet-pink center. 35 cts. each.

Hauptmann Koehl. Dark blood-red. 35 cts. each.

Johnston's Favorite. Crimson.

Miss Lingard. Pure white, pale pink centers. The most popular and earliest white.

Mrs. Jenkins. Large; pure white.

ROVATA caroliniana. Mountain Phlox. Reddish pink flowers in May and June.

Painted Lady. Silvery pink with salmon shadings and red eye.

Rokoko. Large, clear soft pink flowers. 35 cts. each.

Rijnstroom. Rose-pink.

Thor. Salmon-pink, suffused scarlet.

Von Hockberg. Brilliant red.

PHLOX subulata. Moss or Mountain **R** Pink. An early spring-flowering, moss-like plant with evergreen foliage.

Alba. Pure white.

Fairy. Pale blue.

Rosea. Rose-pink.

PLATYCODON grandiflorum. Balloon Flower. A very good hardy perennial producing large, showy, steel-blue flowers the whole season. Excellent for borders.

PRIMULA veris. Hardy Primrose. This **R** strain includes various shades of violet-purple and lilac, as well as buff-orange and salmon. 35 cts. each, \$1 for 3.

PYRETHRUM hybridum. Persian or Painted Daisy. A good hardy perennial with fern-like foliage. Fine for cutting or planting in the hardy border. Mixed colors.

SCABIOSA caucasica. Pin-Cushion Flower; Mourning Bride. Flowers a soft shade of lavender. Grows 1½ to 2 feet high and blooms from June to September.

SEDUM acre. Golden Moss. Low, **R** tufted perennial that spreads over the ground. Bright yellow flowers.

album. A beautiful, glistening, waxy sort of plant of great vigor with delicate, frost-like flowers in midsummer.

kamtschaticum. A bold, leafy plant 6 inches high with broad heads of brassy yellow flowers.

lydium. Bronze foliage. Pink flowers in July.

sarmentosum. Rapid-growing plant with yellowish green foliage and yellow flowers in May and June.

Sieboldi. Round, succulent glaucous foliage. Bright pink flowers in August and September.

spectabile. One of the prettiest erect-growing species with broad, light green foliage and immense heads of handsome, showy, rose-colored flowers.

stoloniferum. One of the most desirable. Evergreen leaves and purplish pink flowers in July and August.

SHASTA DAISY (Chrysanthemum maximum), Alaska. Pure white blooms 4 to 5 inches across with yellow centers.

TRITOMA Pfitzeri. Red-Hot Poker. Spikes of orange-scarlet flowers.

VERONICA. Speedwell. A low-growing perennial on the foxglove order. Blue flowers.

Rincana. Silvery gray foliage and spikes of violet-blue flowers in July and August.

VINCA minor. A tufted, evergreen, half-trailing plant. Dark, leathery foliage and large, purple-blue flowers. Useful in dry, shady places.

VIOLA. Tufted Pansies. Best edging **R** plant for hardy perennial border. Will bloom from May to October.

Admiration. Giant deep blue-purple.

Apricot. Exquisite apricot-yellow.

Jersey Gem. Rich pure violet.

Mauve Queen. Light blue.

Rosy Gem. Deep violet-blue.

White Perfection. Fine white.

Yellow Perfection. Fine yellow.

YUCCA filamentosa. Adam's Needle. Broad, sword-like, evergreen foliage and large, drooping, creamy white flowers on stems about 6 feet high.

filamentosa Hockerii. Variegated leaved. 45 cts. each.



German Iris



Sedum acre



Hardy Phlox, Enchantress

FRUIT TREES

In making the selection of fruits to offer our customers, we believe the following varieties will give the best results. All fruit trees offered are No. 1 grade, two-year-old budded trees. Prices are f.o.b. cars, Pittsburgh, Pa. (Fruit Trees are not available.) The supply of fruit trees for this spring is exceedingly short, therefore the prices here given are subject to change.



Baldwin Apple

Apples

75 cts. each, \$7 for 10

- Baldwin.** Best all-round winter Apple in northern counties.
Delicious. The finest dessert Apple imaginable; midwinter.
Duchess of Oldenburg. Tart; midsummer.
Early Harvest. Fruit yellow; flesh white, crisp and juicy. Good for cooking. Early summer.
Grimes Golden. Delicious flavor all its own; early winter.
Hyslop Crab. Fruit dark red, borne in clusters. The most popular variety for jelly.
Jonathan. Beautiful red spicy-flavored fruits; early winter.
Maiden's Blush. Pale yellow with red cheek. Late fall.
McIntosh. Spicy; bright red; late fall sort.
Northern Spy. Desirable winter sort for northern counties.
Red Astrachan. Best summer dessert and cooking Apple.
Rome Beauty. Handsome fruits of good quality; midwinter.
Stayman Winesap. Dark red, juicy, high-quality winter Apple.
Wealthy. High-quality, early fall sort.
Whitney Crab. Large fruit; yellow striped red.
Yellow Transparent. Earliest ripening Apple; good cooker.

Pears

75 cts. each, \$7 for 10

- Bartlett.** Without doubt the best dessert and canning Pear.
Clapp's Favorite. Superb large yellow fruits; early.
Duchesse d'Angouleme. Big, rich-flavored fruits; late.
Kieffer. A fine culinary Pear; keeps well in storage.
Seckel. Small, delicious fruits; extremely popular.
Sheldon. Not large, but one of the best Pears. Sweet, delicious flavor.

Plums

75 cts. each, \$7 for 10

- Bradshaw.** Fine, large, early, juicy Plum; early August.
German Prune. High-quality fruits; stands more frost than others; late August.
Green Gage. Large, greenish fruits, fine for canning.
Italian Prune (Fellenberg). Delicious, juicy flesh; fine for drying.
Lombard. Handsome reddish fruits with pleasant, juicy flesh.
Shropshire Damson. Like Damson but larger, fine for butter.
Yellow Egg. Oval fruit of rich golden yellow.

Peaches

55 cts. each, \$5 for 10

- Belle of Georgia.** Midseason. White. Freestone.
Crawford Early. Yellow and of unexcelled quality.
Crawford Late. A fine yellow Peach of finest flavor.
Elberta. The standard yellow; large, highly flavored, juicy fruits in early September.
J. H. Hale. Big yellow fruits of high quality; late August.
South Haven. *New.* A variety similar to Elberta but two to three weeks earlier. Productive, well-flavored, and possesses all the good shipping qualities of the original Elberta.

Quinces

85 cts. each, \$8 for 10

- Champion.** Large, late-ripening sort of high quality.
Orange. A mighty fine-quality variety and extremely popular.

Sweet Cherries

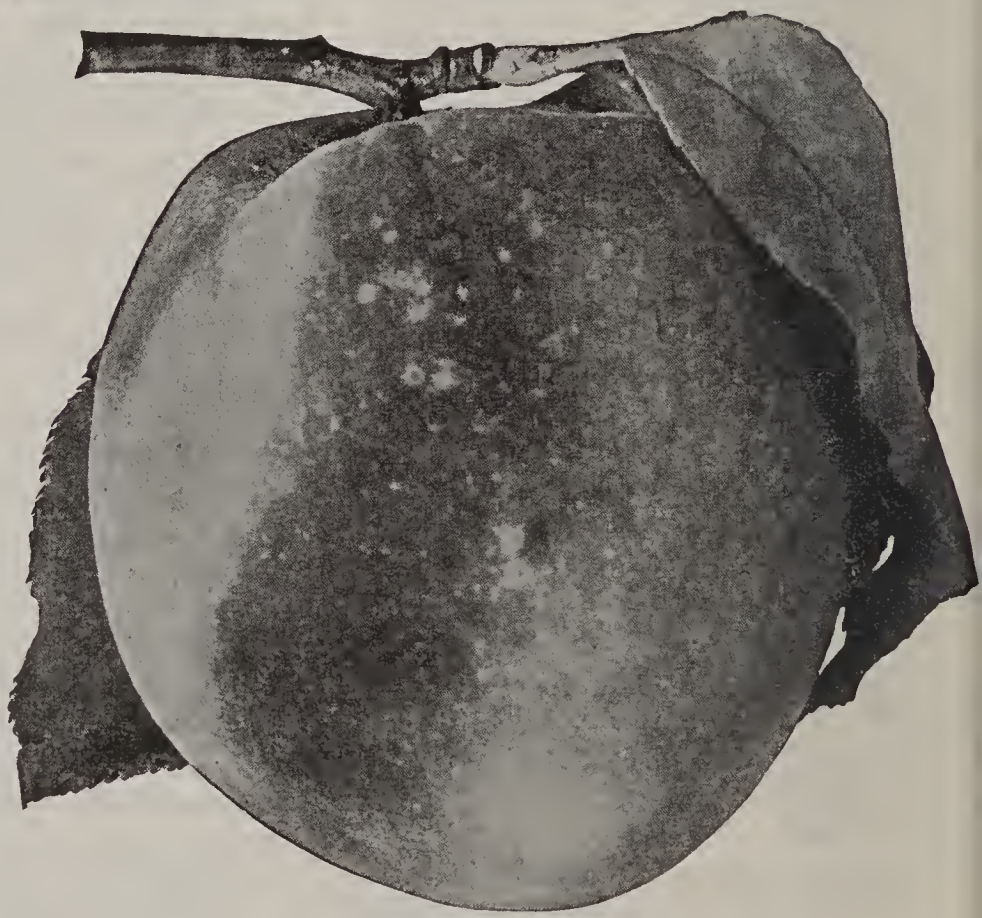
85 cts. each, \$8 for 10

- Black Tartarian.** Fine old fruitful sort; black fruits; late
Governor Wood. A fine home sort; russet-yellow.
Napoleon. Prolific; yellow with red cheeks; midseason.
Windsor. Large, liver-colored; hangs long time; very late.

Sour Cherries

75 cts. each, \$7 for 10

- Early Richmond.** Popular early fruit; good cooker.
Montmorency. The best sour Cherry; heavy crops; midseason.
English Morello. Dark red; rich fruits; very late.



Elberta Peach

Special prices quoted on larger quantities on receipt of specifications

STRAWBERRY PLANTS

Premier
Strawberry

Strawberries in the Garden. No home-garden is complete without a bed or a few rows of Strawberries. This earliest and most delicious fruit, coming at a time when no other fresh fruit can be had, is liked by everybody. By planting some everbearers in addition to the early varieties, you can have fresh berries for the table from June to November, or until freezing weather sets in.

Strawberries for Profit. We know of no other crop that produces equal returns for the acreage planted or the time and labor expended. Market-gardeners and farmers are beginning to appreciate the enormous and ever-increasing demand for fancy home-grown berries and are limiting their acreage only to the amount they are able to take care of at picking-time.

Our Plants. The plants we offer are "new-ground plants" grown in virgin soil in one of the best plant-growing districts of the Northwest. They are large, strong, fully developed plants, ready to make a quick, steady growth the first year.

Order Early. The earlier you order, the surer you are to get the varieties you want. Strawberry plants should be set out as early in spring as the ground can be prepared, the earlier the better. The plants will be sent as soon as they can be dug in the spring and if your ground is not ready, heel them in and cover with straw until you plant them.

DISTANCE FOR PLANTING AND PLANTS REQUIRED PER ACRE

Commercial use. 3 3/4 ft. x 1 1/2 ft. 7,920 plants
Garden use. 2 1/2 ft. x 1 1/2 ft. 11,600 plants
Everbearing Strawberries. 2 1/2 ft. x 1 1/2 ft. 11,600 plants

Extra-Early

Premier. It is the earliest of all Strawberries, has a long fruiting season, and bears unusually large crops of bright, glossy, firm, red berries above the average in size. Excellent shipper.

Blakemore. The coming early berry of outstanding commercial value for the northern half of the country. One of the firmest berries we know, glossy bright red, high in Strawberry flavor.

Fairfax. Large, sweet, richly flavored bright red berries. Vigorous grower and disease-resistant.

Dorsett. A vigorous plant-maker with bright red berries of wonderfully high flavor.

Second-Early

Cooper. The largest Strawberry ever produced. Berry has a sweet, delicious flavor. A large and vigorous variety.

Senator Dunlap. For many years has been grown as the main-crop berry. A very heavy bearer of good-sized, uniformly shaped berries of a dark red color.

Medium Late

Gibson. Produces two to four fruit-stems on each plant. Fruit of fine quality, texture, and flavor. Excellent for table use, canning, or market.

Everbearing

Mastodon. Very productive; unusually large size; brilliant, attractive color; and excellent shipping qualities. Produces fruit ninety days from planting. Pick the first crop from July to killing frosts; the second crop the following June; and the third crop from August to killing frosts in late autumn.

GEM. This new variety has four outstanding points: (1) Large size, which holds from the first to the last picking; (2) good flavor—a true Strawberry flavor which is lacking in most Everbearers; (3) firm, solid fruits which will reach the market in good condition; (4) productiveness above most other sorts, in either wet or dry seasons.

PRICES

	Per 25	Per 50	Per 100	Per 1,000
Premier. Extra-early	\$0 75	\$1 25	\$1 80	\$8 00
Cooper. Second-early	75	1 25	1 80	8 00
Senator Dunlap. Second-early	65	1 10	1 70	6 00
Gibson. Medium late	65	1 10	1 70	6 50
Mastodon. Everbearing	1 00	1 65	2 75	13 00
Gem. Everbearing	1 00	1 65	2 75	13 00
Fairfax. Extra-early	80	1 30	1 90	9 00
Dorsett. Extra-early	80	1 30	1 90	9 00
Blakemore. Extra-early	75	1 25	1 80	8 00

Orders for 500 or more of one variety at the 1,000 rate.

At the prices quoted, we pay the postage, except at the 1,000 rate which is f.o.b. nursery.

On orders for 500 plants and upward we recommend express shipment.

CURRENTS

2-year plants, 30 cts. each, \$2.75 for 10, unless noted

Fay's Prolific. Medium to long clusters of dark red, juicy fruits.

Perfection. Large, bright red fruits; big clusters. 35 cts. each, \$3.25 for 10.

Wilder. Medium-sized, mildly acid red berries in large clusters.

GRAPES

2-year plants, 25 cts. each, \$2.25 for 10, unless noted

Brighton. Big red berries of excellent flavor; productive and vigorous. 35 cts.

Catawba. Luscious dark red berries; late ripening and keeps well. 35 cts.

Concord. The standard Grape. Rich, sweet juicy fruits. 15 cts. each, \$1.25 for 10.

Delaware. Red, sweet and delicious.

Moore's Early. Like Concord, but two weeks earlier.

Niagara. An extra-fine, sweet, white Grape.

Worden. Large bunches of big, black berries of high quality. Earlier than Concord.

GOOSEBERRIES

2-year plants, 35 cts. each, \$3.25 for 10

Downing. Whitish green. The most widely planted and highly prized sort.

Red Jacket. Large reddish green fruits.

RED RASPBERRIES

Chief. New. Produces good-sized berries, even in hot weather, 7 to 10 days earlier than Latham, is heavier yielder, hardier, and a more vigorous grower. Fine shipper.

Latham. Best late sort. Very productive of richly colored, delicious flavored berries.

BLACK RASPBERRY

Cumberland. Very vigorous and productive. Berries large, firm, jet-black, with delicious flavor. Good shipper.

BLACKBERRY

Eldorado. Of best quality and always dependable. A heavy bearer of great jet-black berries. So strong and vigorous that the plants survive the severest winters.

PRICES

	Per 12	Per 25	Per 50	Per 100
Raspberries				
Chief	\$1 10	\$1 60	\$2 50	\$3 75
Latham	1 10	1 60	2 50	3 75
Cumberland	1 10	1 60	2 50	3 75
Blackberry				
Eldorado	1 10	1 60	2 50	3 75

One-year No. 1 plants. Prices given are postpaid.



Concord Grapes

VEGETABLE SEEDS

The home-gardener, as well as the commercial grower, will find in our Vegetable Seed Department an unusually complete list of the best varieties in cultivation. There are varieties to suit every taste and every purpose. In describing them we have endeavored to make selection easy by telling the advantages as well as the disadvantages of each sort, describing as accurately as possible just how each should perform under normal conditions and good cultivation.

Quality First. For more than a half-century we have been supplying the most critical market-gardeners in our immediate territory with the best and purest strains of Vegetable Seeds. The steady increase of our trade during all these years among our home-gardeners, as well as those from distant points, is the best evidence that our seeds give satisfaction.

The test of a seed is the crop it produces—not the price paid for it. It is always our endeavor to supply only the highest bred and most vigorous seeds it is possible to grow. Even the best of seed is none too good when growing conditions are unfavorable, but poor seed will not produce good results, no matter

how much care and help the crop receives. The old saying, "The best is the cheapest," applies with greater force to seeds than to any other commodity. So with us, we aim to supply the highest quality at a fair price; quality comes first.

Whether you order by the packet or the pound, you will receive the same high quality seeds. All of our packet seeds, both vegetable and flower, are put up from exactly the same stocks that we use for pounds, pecks and bushels, so the small gardener can depend upon getting seeds as fresh and as choice in every way as those which the most critical market-gardeners demand. No order is too small to merit our best attention.

ASPARAGUS *Three ounces of seed will sow a 100-foot row; 15 pounds will sow an acre*

Tender young Asparagus shoots fresh from the garden! Those who know Asparagus only as it comes out of a can or with the fine flavor lost in hours of travel from the grower's fields to the table, have no idea of the delicious treat in store for them. Yet, contrary to common belief, Asparagus is no more difficult to grow than any other garden crop.

Equally good results may be secured by planting seed or roots; seed is cheaper but from one to two years' time is saved by starting with roots.

Once established, an Asparagus bed will continue to bear bountiful crops for years; so remember that a little care and patience at the start will be well repaid. Choose a well-drained spot and dig the soil deeply, pulverize it thoroughly and, at the same time, work in a goodly quantity of fertilizer. If the soil is heavy, mix in sand or coal ashes also. If you start with seed, sow it early in the spring, in shallow drills 12 to 15 inches apart, and when the plants are about 4 inches high, thin out the weak and crooked ones, leaving about four good strong plants to the foot.

The following spring, dig up the roots and transplant them to the permanent bed, in rows at least 3 feet apart, setting them 1½ to 2 feet apart in the rows. The roots should be well spread out, with the crown or top about 3 inches below the general level of the bed. Barely cover at first but fill in around the plants as they grow until the level of the surface is reached. No cuttings should be made the first year after transplanting, but the second season will bring a good crop.

MARY WASHINGTON. An improvement on Martha Washington and the result of years of breeding and selection by the U. S. Department of Agriculture. Plants vigorous, very productive and nearly rust-free. Shoots dark green, large, straight, with heavy purple overtone. Seed, pkt. 10 cts., oz. 25 cts., ¼lb. 60 cts., lb. \$2.

Two-year-old roots, by mail, postpaid, 50 cts. per doz., \$1.65 for 50, \$2.75 per 100; by express, not prepaid, \$8 for 500, \$14 per 1,000.

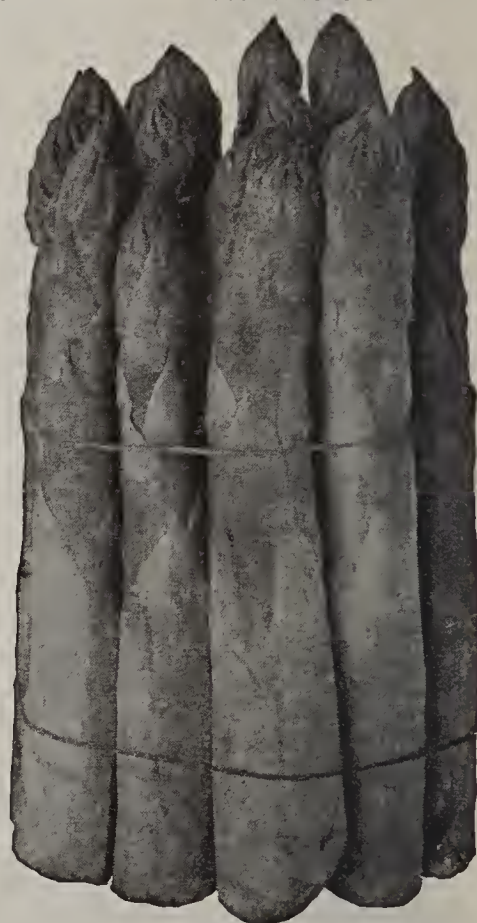
MARTHA WASHINGTON RUST-RESISTANT. A new variety developed by the U. S. Department of Agriculture. It produces abundant crops of large, tender stalks and is practically immune from "rust" and other Asparagus diseases. Without doubt, the finest strain of Asparagus now available. Seed, pkt. 10 cts., oz. 25 cts., ¼lb. 50 cts., lb. \$1.50.

Two-year-old roots, by mail, postpaid, 50 cts. per doz., \$1.65 for 50, \$2.75 per 100; by express, not prepaid, \$7 for 500, \$12 per 1,000.

CONOVER'S COLOSSAL. Large green stalks of enormous size and very productive. The standard market variety.

PALMETTO. Comes early; stalks light green. Smaller than the foregoing but more freely produced, and of better quality.

SEED of above two varieties, pkt. 10 cts., oz. 15 cts., ¼lb. 30 cts., lb. \$1.



Asparagus, Martha Washington

Broccoli

A kind of hardy cauliflower which thrives best in moist fall weather. Although an old-time garden product, its recent popularity urges generous planting. Grow like late cauliflower, sowing in May and transplanting in June or early July.

(An ounce of seed will produce 2,000 plants)

DIRAPA. Productive new variety of high quality, with large, firm, bright green heads, which mature earlier than varieties commonly grown. Pkt. 15 cts., oz. 50 cts., ¼lb. \$1.50.

TRUE ITALIAN SPROUTING. A distinct variety with large, solid heads that stay green. Many sprouts develop from the leaf-axils after the heads are cut, and each terminates in a small head which is also edible. Pkt. 15 cts., oz. 50 cts., ¼lb. \$1.50.

French Artichoke

This highly prized salad can be grown in our climate, provided the plants are given light protection over winter. Start the seed indoors and give the same treatment as you would tomatoes, transplanting to the garden in May. The plants are perennial.

(An ounce of seed will produce 500 plants)

LARGE GREEN GLOBE. The best variety. Pkt. 15 cts., oz. 75 cts., ¼lb. \$2.50, lb. \$8.

Brussels Sprouts

Cultivate like cabbage, sowing the seed in April or May, either in a coldframe or in a sheltered spot in the garden, and transplant in June or early July, setting the plants 2 feet apart. The "sprouts" are like miniature cabbages growing along the main stem.

(An ounce of seed will produce 2,000 plants)

HALF-DWARF IMPROVED. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1, lb. \$3.



Italian Broccoli

**INOCULATE THIS
SEED WITH
STIMUGERM**

BEANS

**Everyone Can
Grow Beans**

Few crops yield more bountiful returns from limited space. There are several classes of Beans and many varieties: all are rich in food value, containing a high proportion of muscle-building protein; served as "Snap" or "String" Beans they are particularly rich in vitamins. There are Green-podded, Wax-podded, and Lima Beans, and of each there are dwarf or bush and pole or running varieties. Generally speaking, the bush kinds bear earlier but the Pole Beans bear more heavily and for a longer time. If you have plenty of space, our advice is to grow some of both, depending on the dwarf sorts for the first pickings and on the pole varieties for the late or main crop. Between Green-podded and Wax-podded varieties there is little to choose, although the Green-podded Beans are generally preferred in local markets.

Growing Bush or Dwarf Beans in the Garden. Even a poor soil will grow Beans, although the heaviest yields are, of course, obtained on well-worked and moderately heavy loams. Wait until the ground is warm before you sow—early May is a good time to make the first sowing in this latitude. Open up furrows $1\frac{1}{2}$ to 2 feet apart and drop the Beans 2 or 3 inches apart in the furrow, covering them $1\frac{1}{2}$ to 2 inches deep. Later plantings should be covered $2\frac{1}{2}$ to 3 inches deep. Keep the soil well loosened around the plants from the time they are large enough to cultivate, but avoid touching them when they are wet with rain or dew, as this will nearly always cause the pods to "rust." For a constant supply of "String" Beans all summer make a new sowing every two weeks from early May until the first of August.

A pint of seed will sow 100 feet of furrow; 1 to $1\frac{1}{2}$ bushels, depending on variety, will be required for an acre when the seed is planted in drills.

Dwarf Green-podded Beans

ASGROW STRINGLESS BLACK VALENTINE. A new, hardy, prolific Bean of the true Black Valentine type, wholly without strings. Unsurpassed by any other on the market, and of easy culture. Quick-growing. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

BOUNTIFUL. A splendid variety, well named, for it is extremely productive and always reliable. It is hardy and thrives on a variety of soils.

In a good many gardens it is the first Bean to come into bearing and it continues to bear for a long time if the pods are picked

as fast as they become ready for use. The pods are flat, of good size, and handsome appearance, always stringless, tender until full grown and of excellent flavor. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

BURPEE'S STRINGLESS GREEN-POD. Another general favorite. Stringless Green-Pod is early and productive, with pods a little shorter than Bountiful but round, thick and very meaty; always perfectly stringless and tender even when old. Excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

GIANT STRINGLESS GREEN-POD. A little later to bear than the kinds described above but a very dependable producer of big crops. A good Bean to plant to succeed the first early varieties. The pods are long, dark green, round, always stringless and very tender. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

TENDERGREEN. This new, early Bean has perfectly round pods $6\frac{1}{2}$ to 7 inches long, quite slender, straight, light green, tender, absolutely stringless, and of high quality. Very productive. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

IMPROVED EARLY RED VALENTINE. Extra-early strain of the old favorite, Red Valentine. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

ASGROW STRINGLESS GREEN-POD. In many respects similar to Full Measure, but four to six days earlier. Especially vigorous in growth, and is not as susceptible to adverse growing conditions as many of the stringless varieties. The pods are long, straight, round, meaty, entirely stringless, and of fine table quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

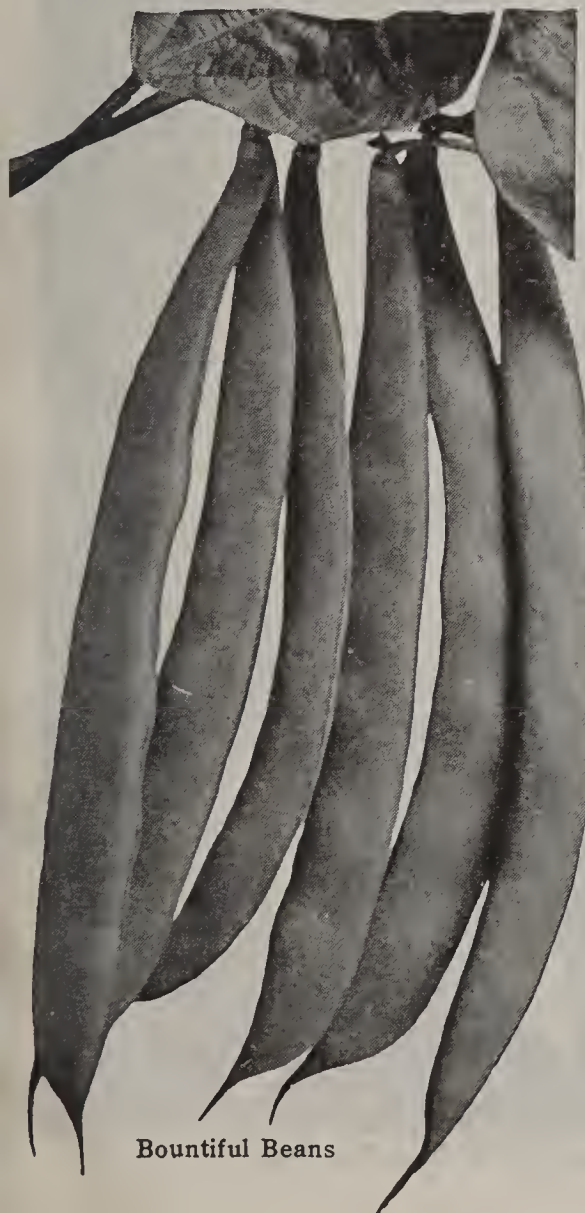
FULL MEASURE. A well-known variety for market-gardens as well as home-gardens. The pods are of good size, round, thick, stringless, tender, and of excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

ITALIAN BLACK-EYE. A very prolific yielder with long, round, slender pods, dark green in color and stringless. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

STRINGLESS GREEN-POD REFUGEE. An improvement on the old 1,000-to-1, being perfectly stringless even when the pods have reached full size and are old enough to shell. The plants are large and thrifty, producing heavy crops; pods large, round, and fleshy. Ideal for canning. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.



Tendergreen Beans



Bountiful Beans

NOTE: One pint of Beans weighs about 1 lb., 1 quart about 2 lbs., and 1 bushel weighs 60 lbs.



Sure-Crop Stringless Wax Beans

WARDWELL'S KIDNEY WAX. An old favorite, well known to gardeners everywhere. It is hardy, early, and of splendid quality. The pods are broad, flat, brittle, and almost stringless, waxy yellow in color. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

ROUND-POD KIDNEY, or Brittle Wax. This Bean is notable for its exceptional quality, being superior in flavor, remarkably brittle and tender, and absolutely stringless even after the Beans have ripened. The pods are long and round, bright yellow in color and very handsome. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

YELLOW BOUNTIFUL WAX. Handsome, very meaty, yellow pods, slightly curved, about 7 inches long, absolutely stringless at all stages, and of delicious flavor. Very productive. Practically disease-resistant. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

KEENEY'S RUSTLESS GOLDEN WAX. A good producer of medium-sized, flat, well-filled stringless pods. Less liable to "rust" than other Wax-podded Beans. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

IMPROVED GOLDEN WAX. Pods are flat and a little longer and thicker than those of the original Golden Wax. Hardy and prolific; quality fair. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

PENCIL-POD BLACK WAX. A late-bearing variety, valuable for midseason use. Pods round, long, slender, and of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

DWARF GREEN-PODDED BEANS FOR SHELLING

DWARF HORTICULTURAL. Also known as Roman Bean. A fine producer of green Shell Beans; useful as a "String" Bean also, for the young pods are tender and meaty. The ripe Beans are round and speckled with purplish red. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

WHITE KIDNEY. Largely grown for dry Shell Beans. Plants are tall, vigorous, and productive. The pods are of good size and showy but tough, and the ripe Beans are large, kidney-shaped, pure white and do not discolor when cooked. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

WHITE MARROWFAT. The favorite Bean for baking. A good producer of large, white Beans of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

RED KIDNEY. Resembles the White Kidney except that the ripe Beans are red in color. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

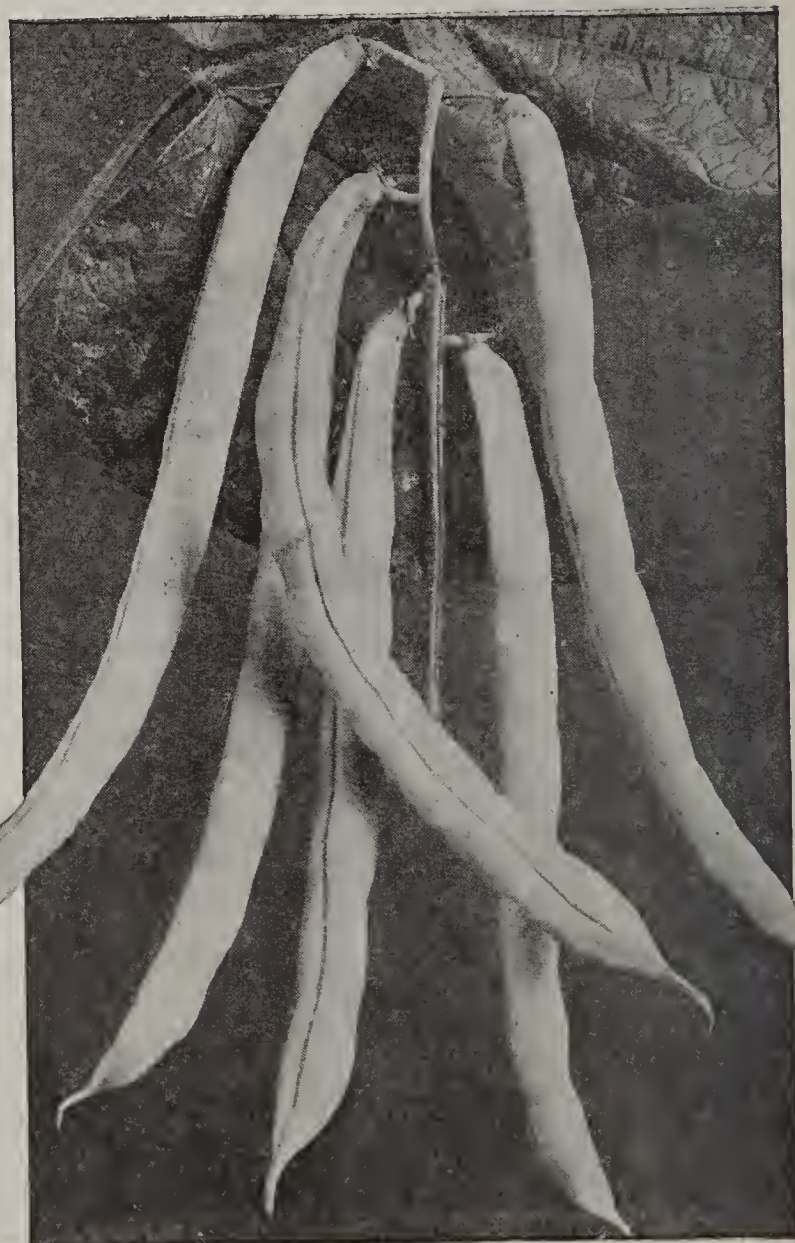
WHITE NAVY, or Pea Bean. Used mostly for field planting; a sure cropper and extremely prolific. The dried Beans are small, round, and white. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

DWARF WAX-PODDED BEANS

The Yellow- or Wax-podded Beans are considered more handsome in appearance and bring higher prices in some sections than the Green-pods. Generally speaking, they are good producers, but where rust or mildew is prevalent, do not stand up quite so well as the Green-podded varieties.

SURE-CROP STRINGLESS WAX. A strong-growing, early variety well described by its name, for it is a most dependable producer of large crops under all conditions. The pods are of good size and most attractive in appearance,

being broad, semi-round, and bright yellow color, entirely stringless, and of fine quality. We can highly recommend Sure-Crop for both market and home-gardens. Pkt. 10 cts., $\frac{1}{2}$ pt. 20c., pt. 30c., qt. 55c., pk. \$2.75, bus. \$9.



Round-Pod Kidney Wax Beans

BUSH LIMA BEANS

One of the finest treats the garden offers is fresh, green Lima Beans. But remember that the seed is tender and will not grow in cold weather or wet ground. Wait until warm weather has surely come (the last of May is generally safe in this latitude), and then sow in a warm, sunny spot, preferably in a rich, mellow soil. Sow Bush Lima Beans in furrows about 1 inch deep and at least 2 feet apart, spacing the seeds 4 to 5 inches apart in the furrow. They will sprout quicker if planted with the "eyes" down. Later on the plants may be thinned to stand 8 to 10 inches apart as they yield best if given plenty of room. The Bush Limas bear earlier than the Pole varieties and are, therefore, more useful where the growing season is short.

A quart of seed will sow 150 feet of furrow; a bushel will sow an acre

BURPEE IMPROVED. A vigorous, productive variety. The bushes are large and bear loads of big, broad pods, each containing 4 to 5 Beans of the largest size and finest quality. Medium early. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

FORDHOOK. Probably the most popular Bush Lima and one of the best for the home-garden, for it is extra early and extremely prolific, bearing good-sized pods which contain 3 to 5 large, thick, meaty Beans of delicious quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

BURPEE'S BUSH. A hardy, reliable variety; prolific, medium early, and of good size and quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

WOOD'S PROLIFIC. An improved strain of the Dwarf Sieva or small-seeded Lima. It is very productive and hardy; valuable for planting where the large-seeded Limas do not thrive. The quality is extra-fine. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

POLE LIMA BEANS

These take longer to bear than the Bush Limas, but yield larger crops and continue to bear for a longer period. The seed is usually planted in hills, at least 3 feet apart each way, dropping 4 to 6 Beans to the hill. Set poles 8 to 10 feet long in each hill to support the vines.

A quart of seed will plant 100 hills; 20 quarts will plant one acre

LEVIATHAN. A general favorite, being early, vigorous, and productive, bearing loads of giant pods, well filled with large tender Beans. One of the most reliable varieties for the home-garden. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

EXTRA-EARLY JERSEY. Comes into marketable size a week earlier than other varieties. Good size and fair quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

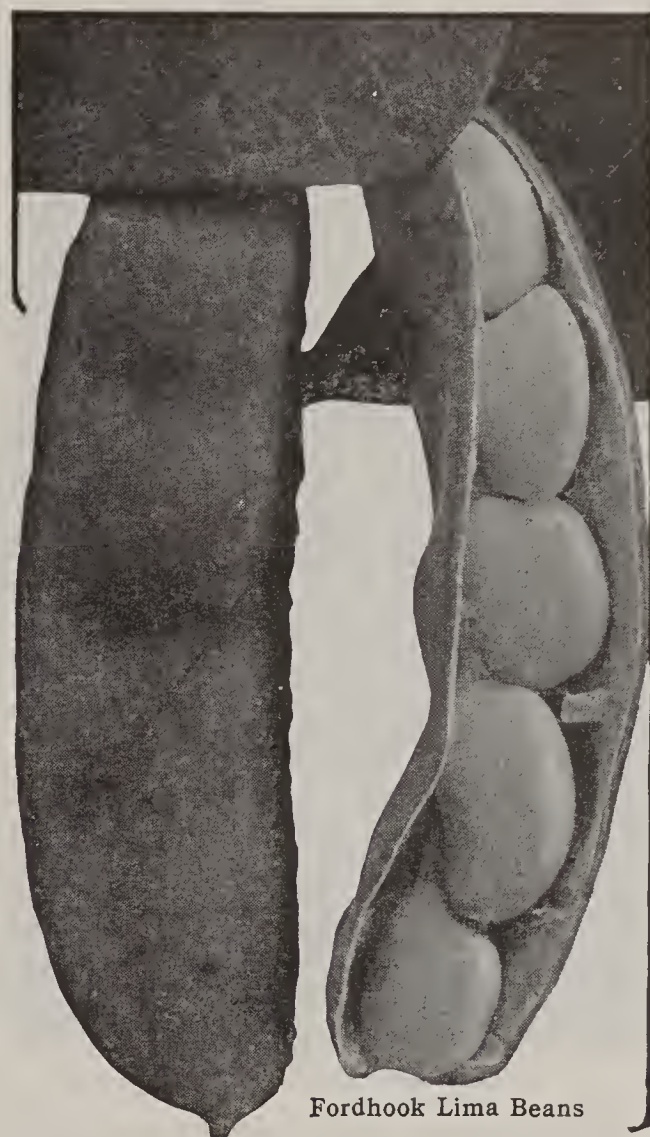
SIEBERT'S EARLY. Extra-early and one of the most productive. When freshly shelled the Beans are large and thick through and of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

DETROIT MAMMOTH. The largest-podded variety in cultivation. Medium early, extremely vigorous and prolific, bearing pods 9 to 11 inches long, containing 5 to 7 mammoth Beans of excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.75, bus. \$13.

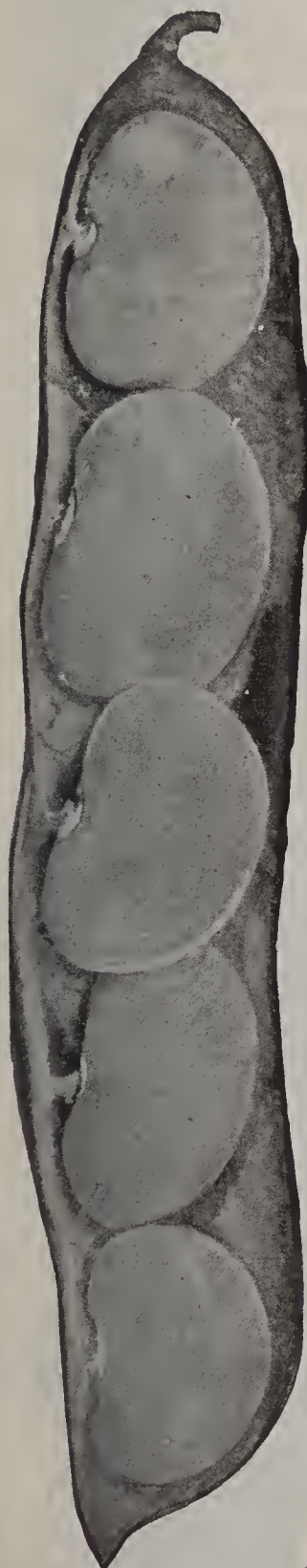
KING OF THE GARDEN. The strongest growing and most productive of the large Limas, bearing broad pods 5 to 6 inches long, containing 4 or 5 large, flat Beans. Allow only two vines to each pole. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

CARPINTERIA. This medium-late variety sets the standard for quality among Pole Limas. It bears large pods, containing 3 to 5 Beans which are very thick and mealy and retain their green color even when ripe. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

NEW POTATO LIMA. One of the heaviest producers of Beans per bushel of pods. A thick Bean of good size and excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.75, bus. \$13.



Fordhook Lima Beans



Leviathan Pole Lima Bean

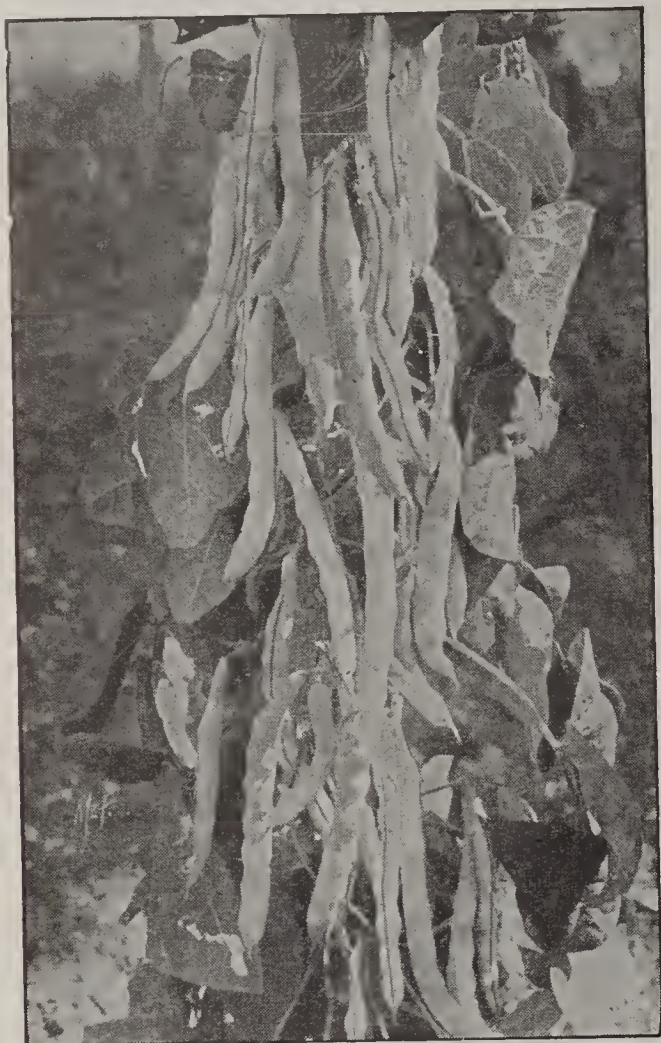
We aim to carry a complete line of Insecticides, and the machines for applying same. Our line of Sprayers and Dusters is complete and up-to-date, and meets all requirements. Prices and descriptions of Insecticides will be found on pages 68 to 74 and Sprayers and Dusters on pages 84 to 88.

FREE DELIVERY

We deliver all garden seeds free of cost.
See page 1

QUANTITY RATES

Half-bushels will be furnished at the bushel rate and half-pecks at the peck rate.



Kentucky Wonder Beans

WAX- AND GREEN-PODDED POLE BEANS

The Pole Beans do not come into bearing so quickly as the Bush varieties but they yield much larger crops and, if kept picked, will continue to bear for several weeks. As the seed is rather tender, they should not be started until about two weeks after it is safe to sow Bush Beans. They succeed best in a well-drained mellow soil which has been liberally enriched with manure. The usual practice is to grow them in hills placed 3 to 4 feet apart, using poles about 8 feet long to support the vines. Drop 6 to 10 Beans in each hill and cover 2 inches deep, thinning out when the plants are well started so as to leave only 3 or 4 of the strongest on each pole. By using string or wire as support, one stout pole may be made to serve several hills.

A quart of seed will plant 100 to 150 hills; from 12 to 16 quarts will plant an acre according to the size of the Beans

KENTUCKY WONDER. The most popular Pole Bean. It is early, reliable under all conditions, and immensely productive, bearing long, round, dark green pods which are tender, stringless when young, and of fine quality. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

KENTUCKY WONDER WAX. Similar in vigor and productiveness to the green-podded Kentucky Wonder but the pods are broader and light yellow in color, fleshy and brittle and slightly stringy. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

GOLDEN CLUSTER WAX. Extra-early and bears for a long season. The pods are of medium length, broad and flat, waxy yellow and most attractive in appearance. In flavor the Golden Cluster Wax Bean is unsurpassed, but the pods should be picked young for they become rather stringy when full grown. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

LAZY WIFE. Late but very productive, carrying great clusters of green pods which are 5 to 6 inches long, semi-round, meaty, stringless, tender, and richly flavored. Useful also as a Shell Bean. $\frac{1}{2}$ pt. 20c., pt. 35c., qt. 65c., pk. \$3.25, bus. \$11.

BURGER'S GREEN-POD STRINGLESS. Also known as the White-seeded Kentucky Wonder. Extra-early and prolific, bearing round, brittle pods of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

KING HORTICULTURAL. Also known as Pole Roman Bean or Speckled Cranberry. Late but productive; pods short, broad, pale green streaked with red. The Beans are extra-good, either green or dry. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

SCARLET RUNNER. A distinct type largely used as an ornamental climber. It grows rapidly; the foliage is luxuriant and the bright scarlet blossoms are most attractive. Pods light green. The dried Beans are used like Limas. $\frac{1}{2}$ pt. 25 cts., pt. 40 cts., qt. 75 cts., pk. \$4.25, bus. \$15.

ASPARAGUS, or Yard-Long. A quick-growing Pole Bean with slender, curved pods 2 feet or more in length. Tender and flavorful when young. $\frac{1}{2}$ pt. 45 cts., pt. 75 cts., qt. \$1.25.

Mangel-Wurzel or Cattle Beets

The Mangels furnish large quantities of nutritious and healthful food for stock and poultry—yields of twenty-five to thirty tons and more per acre are often obtained. Sow the seed in April or early May and when the plants are 2 or 3 inches high, thin them out to stand 8 to 10 inches apart. Harvest before frost and store in pits outdoors or in a dry, frost-proof cellar.

Four to 5 pounds of seed will sow an acre in drills, 8 to 10 pounds when broadcast

LONG RED MAMMOTH. The heaviest yielder, producing enormous roots which grow largely above ground and are easy to harvest. Particularly fine for milch cows. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

NORBITON GIANT LONG RED. Somewhat similar to the above. Excellent for feeding to stock. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

RED GLOBE. Oval or globe-shaped, giving heavy yields on shallow soils. A good keeper. Oz. 10c., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

GOLDEN TANKARD. Large, long roots unusually high in feeding value. A splendid cropper on fairly deep soils. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

WHITE SUGAR. Very productive, rich in sugar and especially good for stock-feeding. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

KLEIN WANZLEBEN. Rigorously selected for high sugar content and the most popular variety with the sugar-beet growers. We offer a productive, easily grown strain. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.



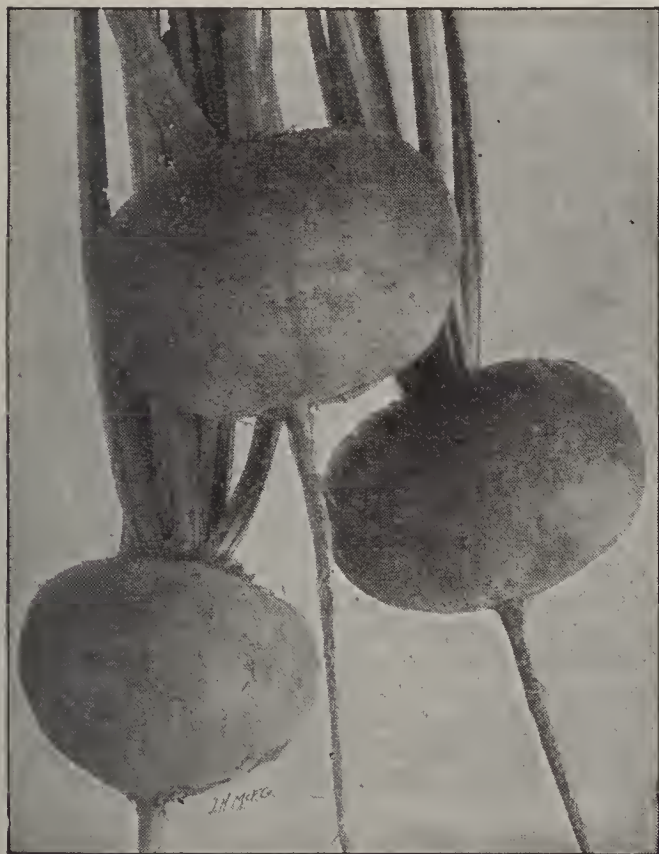
Long Red Mangel-Wurzel

BEETS

An ounce of seed will sow about 50 feet of drill; 6 pounds an acre

But little space is required to grow a good crop of Beets, and almost any soil will do, although the ground should be dug deeply and made fine and mellow with fork and rake if you want smooth, tender, well-developed roots. Make a first sowing as early in the spring as the ground can be worked. Scatter the seed in drills 15 to 18 inches apart, covering the seed about an inch deep and pressing the soil down firmly above it. When the seedlings are about 3 inches high, thin them out so that they will stand 2 to 3 inches apart in the row. The little Beets and "greens" removed in thinning, cooked together, make a delicious dish. Frequent cultivation will help to bring the crop along rapidly. As you harvest the Beets, pull out alternate plants, thus leaving more room for the rest to develop. You can insure a continuous supply of fresh young Beets for the table by making sowings every three to four weeks from early spring up to the middle of July. Late in June make a large planting to produce Beets for winter use. Harvest before frost and store in pits outdoors, or in a dry cellar, covered with sand to prevent shriveling or drying out.

If you want to beat your neighbor with early Beets in the spring, start some seed in a coldframe or in a box indoors in February or March and reset the plants in the open garden early in April.



Crosby's Extra-Early Beets

CROSBY'S EXTRA-EARLY.

The standard early variety for both home-garden and market use. A very superior selection from the old flat Egyptian, being more globe-shaped, nearly as early, and of better quality. The skin is dark red and the flesh deep red. Our stock is highly bred and runs very uniform in shape and size. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

EXTRA-EARLY EGYPTIAN. One of the earliest varieties, making medium-sized, flat, smooth roots with dark crimson skin and flesh. Fine for first crop. Specially adapted for transplanting from hotbeds in early spring. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

EARLY MODEL. An extra-early Beet that is top-notch in quality. The roots are uniformly globe-shaped, with smooth, dark red skin and fine-grained, crimson flesh. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

EARLY WONDER. A new strain of Crosby's Egyptian Beet. Smooth, dark red flesh. Early. Extra-good for market-gardeners. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

EARLY BLOOD TURNIP. An old standby; round with small tap-root, dark red skin and bright red flesh of good quality. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

DETROIT DARK RED. Undoubtedly the most popular variety in cultivation. It is early, smooth, and uniformly globe-shaped, with dark red skin and flesh, fine-grained, tender and sweet. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

PERFECTED DETROIT. An improved strain of Detroit Dark Red. It is early, with round, dark red root and medium foliage. Has no white rings and is splendid for home-gardens, for market, and for canning. Pkt. 10 cts., oz. 20 cts., 1/4lb. 60 cts., lb. \$1.75.

SWISS CHARD

This is a kind of beet which does not make edible roots but produces instead quantities of large leaves which are prepared like spinach. In addition, the stems and midribs make a palatable dish when stewed like celery. With growing appreciation of the valuable part that "greens" play in our diet, Swiss Chard has become one of our most popular vegetables. The seed should be sown in early spring and given the same culture as beets, except that the plants should be thinned to stand 8 to 10 inches apart. Pull the leaves off as they become ready and new ones will grow in their place.

An ounce of seed will sow about 100 feet of drill

LUCULLUS GIANT. A tall variety with deeply wrinkled and crumpled leaves. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1.

FORDHOOK GIANT. An outstanding new variety with curly, rich blue-green leaves and broad white ribs, of a quality better than spinach. Pkt. 10 cts., oz. 15 cts., 1/4lb. 40 cts., lb. \$1.



Early Wonder Beet



Lucullus Giant Swiss Chard

CABBAGE

The chief requisites for growing Cabbage are rich soil and plenty of water. If your soil is hard and poor, add manure, the more the better, and dig it in thoroughly, making the surface as fine and mellow as possible. For early Cabbage, sow seed in hotbed or boxes indoors in January or early February. As transplanting time approaches (about April 15) "harden" the plants by exposing them to the air on warm days so that cold weather or even a light frost will not injure them after they are set out. Start the second crop in March or April. Winter Cabbage is sown in early May and transplanted to the garden in July.

Rows should be at least 2 feet apart, and plants from 1½ to 2 feet apart in the rows, according to variety, the early sorts requiring less space than the large-heading winter Cabbages.

Frequent doses of nitrate of soda will push the young plants along rapidly. The most troublesome pest is the green cabbage worm which, however, is easily controlled by dusting with Slug Shot or similar insecticides. Cultivation to keep down the weeds and preserve the moisture in the soil is important. Give water if necessary during the dry spells.

An ounce of seed will produce 1,500 to 2,000 plants

GOLDEN ACRE. A new early round-headed Cabbage, resembling Copenhagen Market, but a few days earlier. Earliness and fine quality make it a leader of the round-headed varieties. Pkt. 10 cts., oz. 35 cts., ¼lb. \$1, lb. \$3.

COPENHAGEN MARKET, SPECIAL STRAIN. The result of years of breeding by European growers and far superior to the ordinary strain. A profitable variety for market-gardeners. Pkt. 15 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

COPENHAGEN MARKET. The leading early Cabbage, both for market and home-gardens. It grows rapidly to large size, maturing in about 100 days from sowing. The heads are round, extremely solid, with small core and of excellent quality. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

COPENHAGEN MARKET ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.25, lb. \$3.50.

SELECT EARLY JERSEY WAKEFIELD. Matures its rather small, solid, pointed heads in 100 days from sowing. One of the most reliable early sorts; hardy and resistant to frosts and unfavorable weather. Pkt. 10c., oz. 35c., ¼lb. 90c., lb. \$2.50.

GLORY OF ENKHUIZEN. Resembles Copenhagen Market, but makes a little larger growth and matures a week to ten days later. The heads are solid and of fine quality. A good keeper. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

GLORY OF ENKHUIZEN ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.25, lb. \$3.50.



Copenhagen Market Cabbage

EARLY SUMMER. Well-known, second-early Cabbage of the flat or drumhead type. Heads are of medium size, flat, and quite solid. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

BURPEE'S ALLHEAD. Heads a little larger and deeper than Early Summer. A select, uniform, sure-heading strain. About ten days later than Jersey Wakefield. Fine for winter if sown late. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

SUCCESSION. A second-early drumhead variety which is a sure header under all conditions and at all seasons. A little later than Allhead but considerably larger. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

PREMIUM FLAT DUTCH. One of the best winter Cabbages for the home-garden or market. A heavy yielder, producing large, heavy, flat heads which keep well until late in winter. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

HOLLANDER, or Short-Stem Danish Ballhead. The most popular variety for late market. The heads are of only medium size but round, deep, and sound as a bullet. Good keeper. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

HOLLANDER ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.25, lb. \$3.50.

PENN STATE BALLHEAD. A very superior Cabbage developed at Pennsylvania State College. The hard, tight heads weigh one-third more than ordinary heads of same size and are unusually good keepers. Matures in 130 days. Pkt. 15 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

RED CABBAGE

DANISH ROUND RED. A superior strain of Red Cabbage with very hard, perfectly round heads in which the deep color extends clear to the center. Fine for pickling and probably the best of the Red Cabbages, particularly on good soils. Pkt. 10c., oz. 50c., ¼lb. \$1.50, lb. \$5.

MAMMOTH ROCK RED. Heads flattened and very large. A reliable and popular Red Cabbage, well known with market growers. Pkt. 10 cts., oz. 35 cts., ¼lb. \$1, lb. \$3.

SAVOY CABBAGE

Savoy Cabbages are popular because of their rich flavor and late-keeping qualities. The leaves are curled and crinkled, and the heads are firm and solid. They are best late in the season after a heavy frost.

AMERICAN DRUMHEAD SAVOY. A vigorous, hardy variety with large, solid heads and few outer leaves. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

AIRE. Extra early, with fine curled leaves and pointed head. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

CHINESE or CELERY CABBAGE

PE-TSAI. Produces heads often 2 feet high and 6 inches or more in diameter. Sow the seed the last of June or early in July, in shallow drills about 2 feet apart, and thin or transplant the seedlings to stand about 15 inches apart. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1.25, lb. \$3.50.



Hollander Cabbage

FROSTPROOF CABBAGE PLANTS

These plants are grown in the South where the conditions are just suited for growing tough, hardy Cabbage plants during the winter and early spring. In the northern states they can be planted in the open ground a month to six weeks sooner than home-grown plants, and they will stand a temperature of 20 degrees above zero without injury. We can furnish Early Jersey Wakefield, Copenhagen Market, Succession, and Early Flat Dutch and fill orders from December 1 to May 15. Plants are shipped direct from growing station in the South. Specify shipping date on your order.

PRICES BY PARCEL POST, POSTAGE PAID: 50 cts. per 100, \$1.60 for 500, 1,000 or more, \$3 per 1,000.

BY EXPRESS, BUYER PAYING EXPRESS CHARGES: 1,000 to 5,000 plants, \$2 per 1,000; 5,000 or more, \$1.50 per 1,000.



American Drumhead Savoy Cabbage. See page 38

CARROTS

A little more particular as to soil than beets, but otherwise just as easy to grow, Carrots deserve a place in every garden. Always recognized as wholesome adjuncts to the diet, they have recently been found to be very rich in the important vitamins, while no one who has eaten fresh, tender, young Carrots will deny that they make one of the most delicious dishes the garden can supply.

The best crops are grown on soils that were well manured the previous season but good results can be obtained on any good garden soil, provided it is dug deeply and thoroughly pulverized. Freshly manured ground is to be avoided, for it will produce split and misshapen roots. Sow the seed any time after the frost is out of the ground, in shallow drills 15 to 20 inches apart, covering it about an inch deep and pressing the soil down firmly over the seed. When the seedlings are well up, thin them out, leaving them standing about 2 inches apart in the rows. Later on as they begin to reach the edible stage, they may be thinned again, so as to leave at least 4 inches between plants which are to remain until they attain full size. To insure a constant supply, make sowings every three or four weeks from late March to the end of June. Early June is a good time to sow the main crop for roots to be stored like beets for winter use.

An ounce of seed will sow about 100 feet of drill; 3 to 4 pounds are required to sow an acre

EARLY SCARLET HORN, BLUNT ROOT. A quick-growing variety which makes thick, blunt-ended roots about 3 inches long, deep reddish orange in color, and of excellent quality. A fine Carrot for early use and for forcing in frames. Tops small. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

RED-CORED CHANTENAY. A recent introduction of a rich orange color, decidedly deeper than the ordinary Chantenay. The cores are small and nearly the same color as the flesh. Roots are uniform in size and appearance, and a little earlier in maturity than ordinary Chantenay. The surface of the root is smooth and free from large eyes and side rootlets. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

DANVERS HALF-LONG. The most popular Carrot for the main crop, being a reliable, heavy-yielding variety of excellent quality and attractive appearance. The roots are smooth, nearly cylindrical, bluntly pointed, and in good soil will attain a length of 6 to 8 inches. The skin and flesh are bright orange-red, fine-grained and tender. Market-gardeners find it an ideal variety for bunching and it is a splendid winter keeper. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

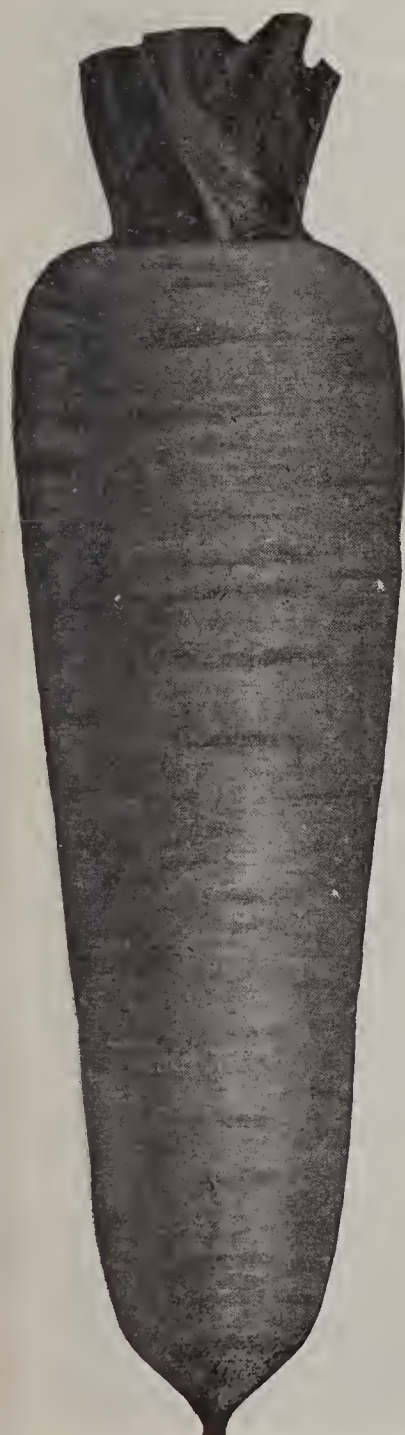
CHANTENAY. Grows more quickly than Danvers and the roots are shorter but broader at the top, tapering to an abrupt point. It produces heavy yields on comparatively shallow soils. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

MORSE'S BUNCHING. Matures in 80 days. Roots rich even reddish orange, small core; 8 inches long, smooth, sweet, tender; short, strong tops. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

HALF-LONG LUC. A French variety of the Danvers type, noted for its superior quality. The flesh is deep in color, very sweet and tender, and almost entirely free from core. Not so hardy as other main-crop Carrots but will produce big crops on well-prepared soil. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

ST. VALERY. A medium-long, tapering or pointed Carrot of fine quality; about 10 inches long and unusually smooth and symmetrical, deep reddish orange in color, and very attractive in appearance. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

IMPROVED LONG ORANGE. A fine strain of the pointed type, producing large, tapering roots 12 to 14 inches long, smooth, bright orange in color and of good quality. Excellent for table or for feeding to stock. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.



Chantenay Carrot



Danvers Half-Long Carrots



Golden Evergreen Sweet Corn

SWEET CORN

One quart of seed will plant 200 to 300 hills or 300 feet of row; 6 to 8 quarts will plant an acre

The one vegetable which every American gardener wants to grow is Sweet Corn, and, fortunately, it is one of the easiest to grow, thriving on most all soils and requiring only a minimum of attention. Since the seed is rather tender, do not make the first sowing until the soil is warm and comparatively dry—the middle of May is usually the earliest it is safe to sow Corn in this section. It can be grown in hills or in rows, the latter method being usually preferred. Hills are placed 2 to 3 feet apart each way, dropping about six seeds in each hill and, when the plants are about 8 inches high, pulling out all but the three or four strongest. Rows are spaced $2\frac{1}{2}$ to $3\frac{1}{2}$ feet apart and the plants thinned to stand 12 to 15 inches apart in the rows. Generally speaking, the late varieties grow larger and require more room than the early sorts. In planting, cover the seed about 2 inches deep, or a little deeper if the weather is very dry. Growing Corn requires lots of water. To preserve all the moisture in the soil and, incidentally, keep down weeds, hoe or cultivate frequently, taking care, however, not to go too deep as Corn roots spread out close to the surface. In order that the ears may develop perfectly they must receive plenty of pollen from near-by stalks; consequently, it is always best to plant Sweet Corn in several short rows, side by side, rather than in one or two long rows. Many gardeners plant only one or two quick-maturing varieties, securing a continuous supply by making sowings every ten days or two weeks from mid-May to early July. Others follow the plan of sowing, all at one time, a number of sorts which will mature in succession. If you want to enjoy Sweet Corn far sweeter and richer than any you have ever been able to buy, grow it yourself and pick it just before it is to be cooked.

BURBANK'S BANTAM. Stalks usually grow to a height of $4\frac{1}{2}$ to 5 feet. The ear is 7 to 8 inches long, has 12 to 16 rows, and matures for table use in 65 to 70 days. It has the original Golden Bantam flavor and is about a week earlier. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.

GOLDEN SUNSHINE. An improvement on Golden Bantam in that the ears are an inch longer, 12-rowed instead of 8-rowed, and it matures about 10 days earlier. It is an attractive golden yellow and equal in quality to the later varieties. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.

GOLDEN EARLY MARKET. This variety was introduced several years ago and has met with very much favor among the market-gardeners. It is about as early as Golden Sunshine, with 8- to 12-rowed ears 6 to 7 inches long. Stalks about 5 feet high, quite sturdy in habit, and ears form close to the stalk and upright. An outstanding early yellow variety. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

WHIPPLE'S EARLY YELLOW. Ears about twice the size of Golden Bantam, 12- to 16-rowed, of very fine quality. Matures in about 85 days. $\frac{1}{2}$ pt. 20c., pt. 30c., qt. 50c., pk. \$2.50, bus. \$8.

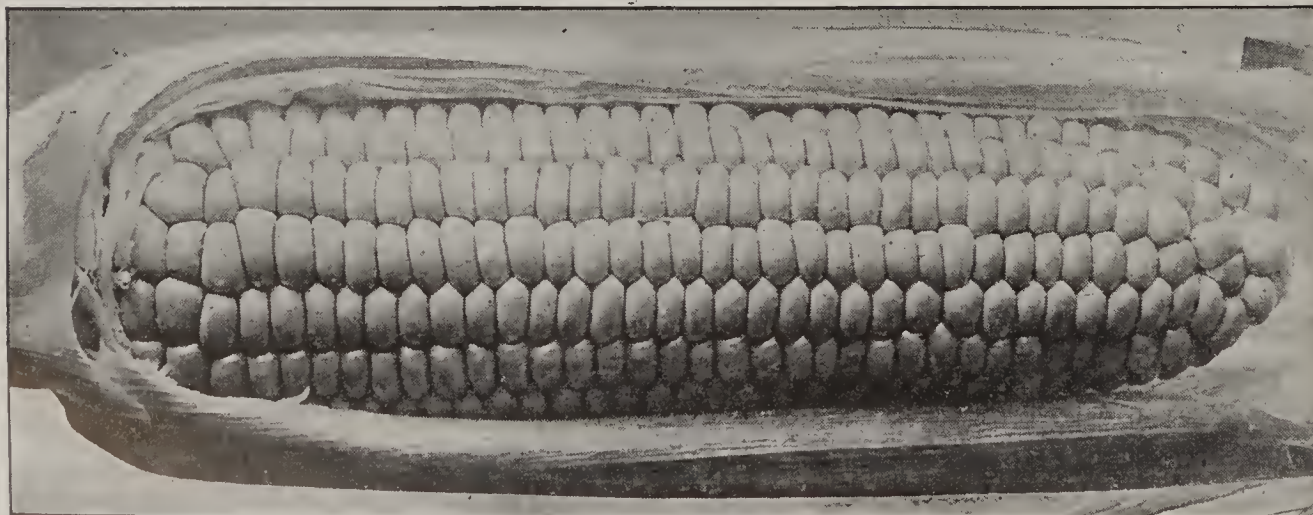
GOLDEN BANTAM. The delicious little golden yellow ears are known wherever Sweet Corn is grown. It is one of the quickest to mature its crop, and, since the seed is hardy and can be planted a week or so earlier than other sorts, it can always be depended on to supply the first true Sweet Corn of the season. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

DELUE'S GOLDEN GIANT. Undoubtedly the finest Sweet Corn now in cultivation! The result of many years of rigorous scientific breeding, it is as sweet, tender, and rich in flavor as the famous Golden Bantam, practically as early, more productive, and much larger. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

BARDEN'S WONDER BANTAM. An excellent variety for home or market growers. Large yellow deep grains. Ears a third larger than Golden Bantam, often 8 to 10 inches long. Stalks 5 to 6 feet high. Early as Bantam and equal if not superior in quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

GOLDEN EVERGREEN. A fine, large-eared, deep-grained yellow Sweet Corn, produced by crossing Golden Bantam and Stowell's Evergreen. A midseason Corn that remains tender and sweet for a long time after it reaches full size. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

EARLY MAYFLOWER. The earliest white Sweet Corn that produces an ear of good size and quality. Medium in growth, productive and hardy, bearing ears 7 inches long with 8 or 10 rows of broad, tender, pure white kernels. Fine for first early. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.



DeLue's Golden Giant Corn

NOTE: One pint of Corn weighs about $\frac{3}{4}$ lb., 1 quart about $1\frac{1}{2}$ lb., and 1 bushel about 48 lbs.

SWEET CORN, continued

GOLDEN CROSS BANTAM. (Hybrid.) Excellent for market-gardeners or for the home-garden. Stalks sturdy, with exceptionally broad, dark green leaves. Ears 10- to 14-rowed and 7½ to 8 inches long. Ready for market in about 88 days. Very prolific. Highly resistant to Stewart's disease. Extremely uniform in plant and ear characteristics and maturity. ½pt. 30 cts., pt. 45 cts., qt. 75 cts., pk. \$4.25, bus. \$15.

GOLDEN COLONEL. Given award of merit in All-America Seed Selections for 1936. Like Country Gentleman except color, which is brilliant yellow. The only yellow Sweet Corn ripening with main-crop sorts. A valuable addition to Sweet Corn for market- and home-gardeners. ½pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.

GOLDEN ALPHA. Ears cylindrical, 6 to 8 inches long, uniformly 8-rowed. The kernels are rich golden cream, of matchless flavor and quality. Vigorous, sturdy stalks. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.

KENDEL'S EARLY GIANT. One of the most popular of the medium-early white Sweet Corns for market. Ears 8 to 9 inches long and 12-rowed, of good quality and very productive. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

HOWLING MOB. Undoubtedly the finest of the medium-early varieties, unusually large for so early a sort and not surpassed in quality by any other white Sweet Corn. It comes in about 12 days after Mayflower. The best second-early Sweet Corn for the home-garden and extensively planted for market. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

EARLY CHAMPION. A medium-early variety, ears large, 14- or 16-rowed, well filled with large, broad grains of good quality. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

WHIPPLE'S EARLY WHITE. Matures about a week later than the small extra-early sorts. Ears 8 to 9 inches long with 16 or 18 rows of pearly white and sweet grains. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

EARLY EVERGREEN. An early selection of the old standby, Stowell's Evergreen. A vigorous, productive strain, not quite so tall but several days earlier than Stowell's, bearing large ears of typical Evergreen type and quality. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

SCOTT'S EARLY PERFECTION. As an early main-crop white Sweet Corn it has no superiors for either home or market use. It follows close after Howling Mob. Pkt. 10 cts., ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

EARLY MAMMOTH. The earliest of the so-called Mammoth varieties. Coming in with Early Evergreen, it produces heavy ears 9 inches long with very broad grains of delicious quality. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

STOWELL'S EVERGREEN. The old, reliable, ever-popular late variety. The ears are 8 to 10 inches long with 16 or 18 rows of very deep, sweet kernels. It remains tender and sweet for a long time. Pkt. 10 cts., ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

WHITE EVERGREEN. An exceptionally sturdy and productive strain of Stowell's, bearing a slightly larger, broader ear and broader, whiter grain. Of high quality and perhaps the best for canning. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

LATE MAMMOTH. The largest of all Sweet Corns and one of the very finest in quality. Ears often 12 inches long, deliciously sweet. A week or ten days later than Evergreen. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

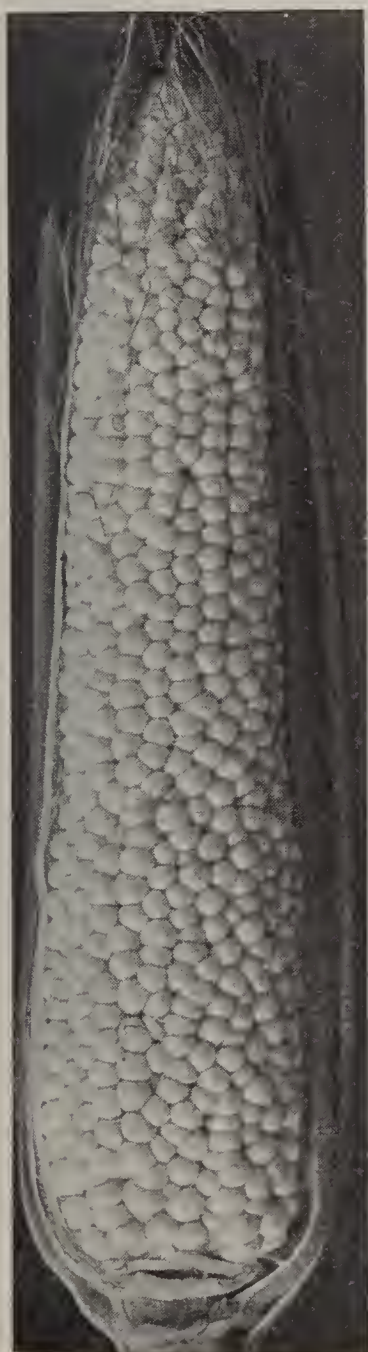
COUNTRY GENTLEMAN. The favorite main-crop Corn with many gardeners, on account of its fine rich flavor. The ears are 7 to 8 inches long with long, narrow kernels set densely and irregularly on a very small cob. Often called "Shoe-Peg." Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.

BLACK MEXICAN. The ears are of good size with broad kernels which are bluish white when they reach the edible stage and turn violet when cooked. Very sweet and tender. ½pt. 20 cts., pt. 30 cts., qt. 50 cts., pk. \$2.50, bus. \$8.

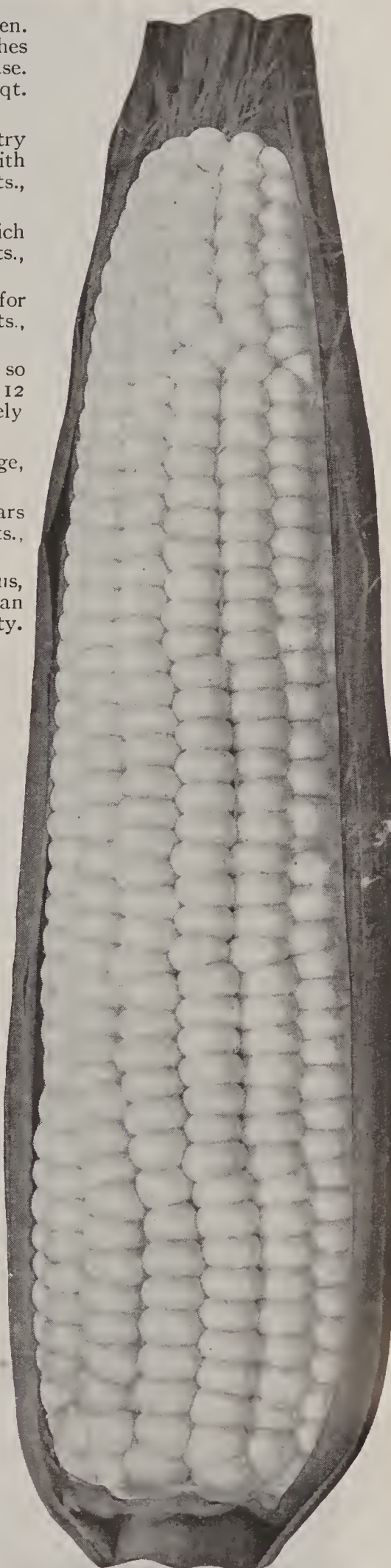
EXTRA-EARLY ADAMS. Not a true Sweet Corn but extremely hardy and early. ½pt. 15 cts., pt. 25 cts., qt. 40 cts., pk. \$2, bus. \$6.

POP-CORN

WHITE RICE. The most popular sort for general use. Productive; popping quality excellent. Prices shelled, lb. 15 cts., 2 lbs. 25 cts.



Golden Colonel



Late Mammoth
Large ears, very sweet and tender

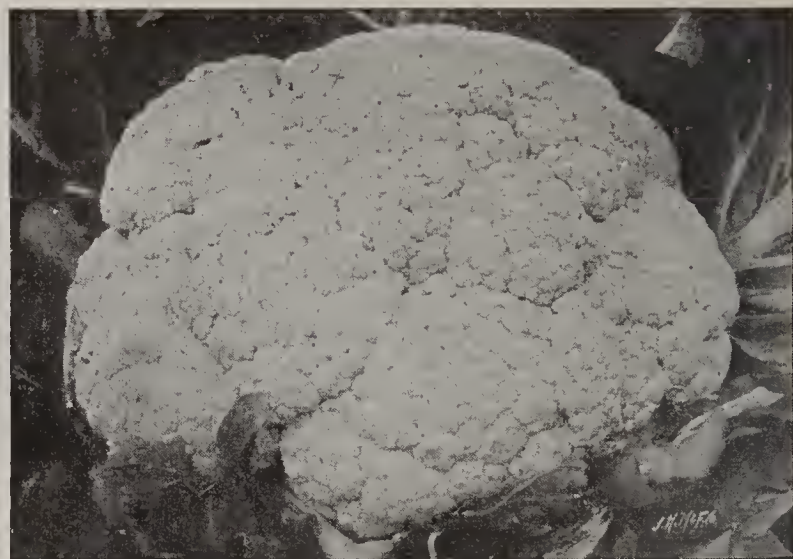
Protect your Corn with New Improved Semesan Jr.
See page 71

CAULIFLOWER

Rich soil, plenty of moisture, and cool weather at the time of heading are required to grow good Cauliflower. In this part of the country it is advisable to time the sowing so that the plants will mature either before the hot, dry days of midsummer or in the fall. Sow the seed and treat the young plants exactly as you would cabbage, starting the spring crop in flats indoors or in the hotbed early in February and transplanting to the garden in May after danger from frost is past. Sow for fall crop in coldframe or seed-bed in May and transplant in July. When you set the plants out, space them about 1½ feet apart in rows 2 feet apart, digging in plenty of manure if it is available. When the plants show signs of heading, water them freely. Finally, when the heads are about 2 inches in diameter, tie the outer leaves loosely together over the top with a soft twine, to protect them from the sun and blanch them white.

An ounce of seed will produce about 2,000 plants

SELECT EARLY SNOWBALL. Extra-early and generally considered to be one of the surest headers. It produces deep, solid heads of medium size, pure white, and of fine quality. Being compact in growth, with small outer leaves, the plants can be set close together. Forces easily and is often grown in greenhouse or frames. Snowball is the most popular Cauliflower with the commercial growers and is for either early or late crop in the home-garden. Pkt. 40 cts., ¼oz. 75 cts., oz. \$2.50, ¼lb. \$8,



Select Early Snowball Cauliflower

DANISH GIANT, or Dry Weather. A little later than Snowball and the plants are larger. Preferred in some sections because it will grow and head during dry weather. Pkt. 40 cts., ¼oz. 75 cts., oz. \$2.50, ¼lb. \$8,

CUCUMBERS

A dozen or so good, strong plants on well-dug, moderately rich soil will produce all of the pickles and slicing Cucumbers the average family will want. For an extra-early crop, start indoors or in a frame about April 1, sowing the seed in paper pots or dirt-bands or on the bottom of inverted sods, and transplant to the garden the latter part of May, moving sod and all in order to disturb the roots as little as possible. Sow the main crop directly in the garden late in May, and, for a continuous supply, make additional sowings every two weeks up to the middle or latter part of July. For a special crop of pickles, sow seed about July 1. Before setting out the plants or sowing seed in the garden, prepare hills 4 to 6 feet apart, digging up the soil to a depth of a foot or more and mixing in plenty of manure or compost. Cucumber roots grow deep and are not much benefited by surface fertilizing. If the soil is stiff and heavy it will be improved by the addition of sand as well as manure. Leave the soil in the hills loose and a little higher than the general level of the garden. Sow eight to ten seeds in each hill and when the plants come up, thin out all but the strongest three or four. Do not disturb the vines after they have started to spread. Pick the fruits as fast as they become ready for use in order to keep the vines bearing for a long period. If the striped beetles interfere with the development of the young plants, spray them with Pyrox or dust with Dutox. See insecticide pages.

An ounce of seed will plant about fifty hills; 2 pounds of seed will be required for an acre

DAVIS PERFECT. One of the best all-round Cucumbers in cultivation, for many years a favorite with home and market-gardeners alike. It is a dependable producer of very long, slender fruits which are rich dark green color and of finest quality. It is a good shipper and holds its deep green color for a long time. Well adapted for greenhouse culture; medium early. Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. \$1.25.

IMPROVED EARLY WHITE SPINE. Extra early and prolific. Produces medium-sized, light green fruits of fine quality for slicing. Good for pickles also, and a popular sort for the home-garden. Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. \$1.25.

KIRBY STAYGREEN. The earliest White Spine variety. Handsome fruits 7 to 8 inches long, of a beautiful dark green color. Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. \$1.25.

BLACK DIAMOND.

The earliest White Spine Cucumber. Fruits dark green, 7 to 8 inches long, perfectly smooth, of handsome appearance. Excellent for both small and large growers. Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. \$1.25.

HEINZ PICKLE.

A dependable plant that bears excellent crops of well-formed fruits when other varieties fail. The Cucumbers are blunt at both ends, deep russet-brown, and get large when mature. Pkt. 10 cts., oz. 15 cts., ¼lb. 45 cts., lb. \$1.25.



Improved Early White Spine Cucumbers

All garden seeds are delivered prepaid at prices quoted in this catalogue

CUCUMBERS, continued

STRAIGHT 8. A new variety that gets its name from its form and length. The cucumbers are straight, 8 to 10 inches long, smooth, and deep green in color. The flesh is crisp, white, and snappy. Seed-cavity small. Oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

EARLY FORTUNE. A highly bred variety of the White Spine type. The vines are vigorous, producing big crops of handsome, long, slender fruits, deep green in color and exceedingly uniform in size and shape, with crisp, firm flesh and few seeds. Early, fine for slicing and one of the best for market. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

EXTRA-LONG, or Evergreen White Spine. A selection from the standard White Spine type, producing fruits 10 to 12 inches long, dark green in color, smooth, and of splendid quality for slicing. Good for late crop and for greenhouse forcing. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

COOL AND CRISP. An early strain of the White Spine type. Fruits about 8 inches long, thick at the middle but tapering off at the ends; light green in color; quality good. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

KLONDIKE. A medium-early strain of White Spine Cucumber, notable chiefly for its unusually dark green color which it holds for a long time even under the hottest sun. Fruits of good size and shape. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

FORDHOOK FAMOUS. An exceptionally vigorous sort, bearing for a long season. The fruits are of giant size, often 15 inches long, thick through and slightly tapered at the ends, dark green in color and with crisp, solid flesh and few seeds. An ideal home-garden salad Cucumber. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

CLARK'S SPECIAL. A very attractive, dark green Cucumber, uniform in length (8 to 10 inches), and smooth in appearance, having very few white spines. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

LONG GREEN TURKEY. One of the best for pickles and useful for slicing as well. Late but very productive. The fruits when full grown are 12 to 14 inches long, straight and slender, slightly warted, dark green with crisp white flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.



Davis Perfect Cucumbers. See page 42

EXTRA-LONG JERSEY PICKLING. Extensively grown for large pickles. The fruits are slender and tapering, growing 6 inches long, medium green in color. Extremely prolific. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

GREEN PROLIFIC, or Boston Pickling. For small pickles. Produces short, thick, bright green fruits, smooth and symmetrical. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

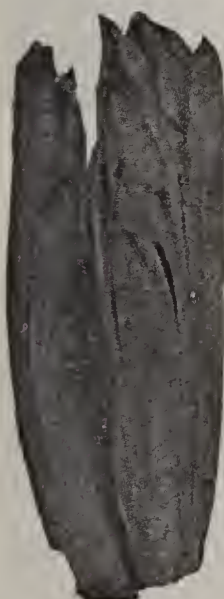
EVERBEARING. Quite similar to Early Frame, but later, more prolific, and bears for a longer season. Largely grown for pickles. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

LONGFELLOW. A very desirable late variety suitable for home-gardens or market-gardeners. Fruits 12 to 15 inches long, dark green, uniform, straight, and attractive, holds color and crispness well after picking. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 55 cts., lb. \$1.50.

JAPANESE CLIMBING. A good Cucumber for the small garden as the vines can be trained on fence or trellis; in fact, it requires some sort of support. Fruits long and thick, crisp, tender and of fine quality. If kept picked, the vines will bear freely all season. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 65 cts., lb. \$2.

WEST INDIA GHERKIN, or Bur. Used for pickles. The vines are luxuriant, bearing quantities of small, nearly round fruits, light green and covered with spines. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 65 cts., lb. \$2.

CHICORY



Witloof Chicory

The large-rooted variety is grown for its roots, which may be cooked and served like turnips and they are sometimes dried and used to adulterate coffee. The Witloof variety is highly esteemed as a winter salad, for which purpose the plants are taken up in the fall, cut back nearly to the top of the root, and then covered with soil in a box or trench in a warm cellar. The new leaves, which grow from the old roots in about a month's time, are nearly white, crisp, and of a fine, piquant flavor. Sow Chicory seed in April or May, in shallow drills, and thin the plants to stand 4 to 6 inches apart.

An ounce will sow about 100 feet of drill

LARGE-ROOTED. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.35.

WITLOOF. Sometimes called French Endive. Pkt. 10c., oz. 20c., $\frac{1}{4}$ lb. 45 cts., lb. \$1.35.

COLLARDS

GEORGIA, or Southern. Largely grown for "greens" in the southern states. Produces a large cluster of tender leaves at the top of its long stem. Sow late in the spring and give the plants plenty of room to develop. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CORN SALAD

A hardy, quick-growing plant, popular as a substitute for lettuce in late fall and early winter. Sow the seed early in the fall in shallow drills, and give plenty of water. Late plants, covered with a light mulch of straw or leaves, will be suitable for use in early spring. *An ounce of seed sows about 100 feet of drill.*

LARGE-SEEDED. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CRESS (For peppery salads and garnishes)

FINE-CURLED PEPPER GRASS. Sow the seed any time from early spring on. It need not be grown in rows and requires no thinning. The leaves can be cut several times before the plants begin to form seed. Make sowings every week or ten days, a small patch at a time, for a continuous supply. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

WATER CRESS. (True.) Grows in damp places. Sow the seed in shallow water along the bank of a stream. No further care is required after sowing. Pkt. 15 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

DANDELION

The cultivated form is much larger and heavier than the common wild Dandelion. If the leaves are tied together, the center of the plant will blanch as white and clear as endive. Sow the seed early in shallow drills, in rich soil, and thin the plants to stand about 1 foot apart. Cultivate frequently and keep out weeds. *An ounce of seed will sow about 100 feet of drill.*

IMPROVED FRENCH. Pkt. 20c., oz. 75c., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

CELERY

Celery is an aristocrat among the garden vegetables—one of the crops the real gardener boasts about. Yet it is by no means so hard to grow as many people think. And home-grown Celery is certainly worth a lot of trouble. In the first place, Celery wants plenty of fertilizer—enrich the spot where you are going to grow it with manure, humus, or rich compost, or if you lack these, with a commercial fertilizer high in nitrogen. On heavy clays, manure or humus is particularly needful. Celery seed is rather slow and irregular in sprouting. For early crops sow indoors or in a hotbed about March 1, barely covering the seed with soil. When the seedlings are 2 to 3 inches high, thin them out or transplant them $1\frac{1}{2}$ to 2 inches apart. "Harden" them by exposing to the air more and more as the season progresses and by the end of May they should be ready to go out in the garden. For winter Celery, sow seed in a coldframe or sheltered spot in the garden about mid-April and reset in the trenches about July 1. It is a good plan to cut off the tops of the plants when they are 4 or 5 inches high to make them more stocky.

When ready to transplant to the garden, dig the soil deeply, pulverize it thoroughly, and then make trenches about 6 inches deep and 6 inches wide at the bottom, spacing them 3 to 5 feet apart. Set the plants 6 to 8 inches apart in the bottom of the trenches, firming the soil about them. Do not work around the plants or permit dirt to get on the leaves when they are wet. Commencing when the plants are about half-grown, fill in the trenches and pull dirt up around them gradually, until finally all but the top leaves are covered, but be careful not to let dirt get into the heart. This process not only blanches the stalks and heart but brings out the rich Celery flavor. The same result may be secured by the use of paper Celery bleachers or by placing boards, 10 to 12 inches wide, against the plants on either side. For winter use store in the cellar or leave banked up in the trenches, cover with straw or loose litter to prevent freezing and with boards on top to keep out rain.

An ounce of seed will produce 3,000 plants; one-half pound is required for an acre

EASY BLANCHING. An ideal Celery for the home-garden and a leading variety for market, combining hardiness, early maturity, and good keeping quality with ease of blanching and fine flavor. The stalks are of medium height, thick through, and brittle; the heart is heavy, blanching quickly to a clear light yellow. Less liable to blight than other sorts, and good for both early and late crop. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

GOLDEN SELF-BLANCHING. One of the finest early Celeries in cultivation; a favorite for early market. It is rather low and compact in growth, with thick, round stalks and heavy heart, blanching easily to a rich golden yellow. In flavor and quality it is unsurpassed. Our stock is from a superior strain of French-grown seed. Pkt. 10 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

GOLDEN PLUME or WONDERFUL. A new Celery, resembling Golden Self-blanching in crispness and flavor, but much larger and ranker in growth, blanches quicker and matures earlier. It is also more blight-resistant than Golden Self-blanching. Pkt. 15 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

WHITE PLUME. A very early, easily grown variety with tall, handsome stalks which blanch quickly to a silvery white. A favorite. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

GOLDEN PHENOMENAL. A new variety introduced recently and very highly recommended by Celery growers. The general characteristics are

those of Golden Plume, but it is decidedly taller, and the stalks are much longer to the joint. They usually grow 27 to 28 inches over all, and from 8 to 9 inches to the joint. The season for planting and maturity is the same as Golden Plume. Plants are heavy, compact, and full-hearted. The stems are broad and thick, brittle and free from strings, of fine flavor, and of excellent quality all through. Pkt. 15 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

GIANT PASCAL. A fine, late Celery with broad, thick, heavy stalks of superb nutty flavor; blanches yellowish white. A good winter keeper, retaining its flavor and crispness in storage. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

FORDHOOK. A distinct variety of remarkably fine quality. Stalks smooth, entirely free from stringy fibers, and $1\frac{1}{2}$ inches through when cut. Blanches pure white but heart has a tinge of light, buttery yellow. Unsurpassed in its crisp, nutty flavor. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

WINTER QUEEN. Another late sort of strong, compact growth; solid and excels in keeping quality. Medium in height with thick, brittle stalks. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

CELERIAC or TURNIP-ROOTED CELERY

The roots—not the stalks—are the edible portion of this plant. They are used for flavoring soups and in stews, in place of Celery or celery seed, and are also cooked or used as a salad. Grown like Celery but does not require blanching.

LARGE PRAGUE. A productive variety with large, round, smooth roots, free from side shoots. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.



Golden Plume or Wonderful Celery



Celeriac



Black Beauty Eggplant

plants to stand 10 to 12 inches apart in the rows. When full grown, tie the tips of the outer leaves together over the center of the plant (when the leaves are dry), to blanch the heart, which will take about a week's time.

GREEN CURLED. The hardiest and most vigorous kind. The plants are large and handsome, with finely cut and fringed, dark green leaves. The heart blanches easily to clear white. Quality fine. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

WHITE CURLED. Foliage is a little finer than the Green Curled and the inner leaves become creamy white without blanching. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

BROAD-LEAVED (ESCAROLLE). The leaves are broad and quite thick and heavy, slightly twisted and scalloped. Medium green in color, blanching readily, and of good quality. Used as a winter salad and also cooked like spinach. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

BATAVIAN FULLHEART. An improved strain of Broad-leaved, with larger leaf, broader, thicker head at eating-stage, and earlier in maturity. Good quality and very attractive. Pkt. 10c., oz. 20c., ¼lb. 50c., lb. \$1.50.

LARGE CURLED PANCALIER. A vigorous grower with thick curled leaves and red ribs. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

EGGPLANT *An ounce of seed will produce about 1,000 plants*

Eggplant is a warmth-loving vegetable, growing best in a light, mellow, well-enriched soil. Since it requires a long growing season and plenty of heat at the time the fruits are developing, it is necessary to start the seed in March, in hotbeds or boxes indoors. Push the seedlings along with plenty of light, heat, and moisture, and when they are about 3 inches high, transplant them to 3- or 4-inch paper pots or dirt-bands. Early in May commence to "harden" the plants gradually, by exposing them to the air on warm days, but protect them carefully from chills and drafts at all times. Set them out in the garden about June 1, spacing them 2 to 2½ feet apart each way. Disturb the roots as little as possible in transplanting, and water freely.

NEW YORK IMPROVED SPINELESS. A very productive sort, bearing large, smooth, dark purple fruits of good size and quality, six to eight fruits to the plant. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

BLACK BEAUTY. A favorite in home-gardens; a week to ten days earlier than the preceding. Fruits are of enormous size, smooth, purplish black in color and of fine quality. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

ENDIVE *An ounce of seed will sow 150 feet of row; 3 pounds will sow an acre*

An appetizing and healthful salad which is grown principally for fall and early winter use, as the plants are hardy and develop perfectly in cool weather. Sow the seed any time from early April to the end of July, the best results usually being obtained from late June or early July sowings. Plant in shallow drills about 15 inches apart and thin the



Batavian Fullheart Endive

KALE (Borecole)

Makes delicious "greens" for fall and early spring use. For the fall crop, sow seed in May in shallow drills and thin or transplant to stand about 2 feet apart each way. Cultivate like cabbage. Light frosts will not injure Kale but will improve its flavor.

An ounce will sow about 300 feet of drill; 4 pounds will sow an acre

DWARF CURLED SCOTCH. Extremely hardy and fine for early winter use. Grows 15 to 18 inches high and produces a heavy crop of beautifully curled, bright green leaves, tender and of fine flavor. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

TALL CURLED SCOTCH. Like the dwarf form but grows about 2½ feet high. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

MOSS CURLED. A more compact, curlier variety of Scotch Kale, making a handsome appearance in market and of high culinary quality. We recommend it. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.25.

DWARF GERMAN. Low and compact in growth, with finely curled, yellowish green leaves. Nice for garnishing. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 90 cts.

KOHLRABI

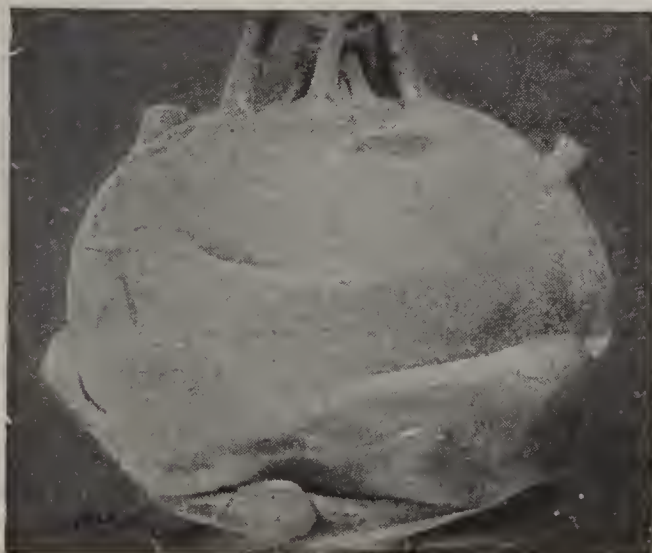
Sometimes called Turnip-Rooted Cabbage. Sow the seed in shallow drills in April, or for extra-early crop start in the hotbed in March. Thin or transplant the plants about 6 inches apart. Kohlrabi grows rapidly and should be used when about half-grown, 2 to 2½ inches in diameter. For a continuous supply make sowings every ten days up to the middle of July.

An ounce of seed will sow about 250 feet of drill

EARLY WHITE VIENNA. The quickest growing and most popular kind for table use. Leaves few and small; bulbs of medium size with white skin and flesh, tender and of delicate flavor. Pkt. 10 cts., oz. 35 cts., ¼lb. 85 cts., lb. \$2.50.

EARLY LARGE PURPLE. A little later and larger than the White Vienna, and a reliable sort. Skin purple; flesh white. Pkt. 10c., oz. 35c., ¼lb. 85c., lb. \$2.50.

LARGE GREEN. Generally used for stock-feeding. Produces large bulbs with greenish white skin; rather tough when full grown but suitable for table use when small. Pkt. 10 cts., oz. 30 cts., ¼lb. 75 cts., lb. \$2.



Early White Vienna Kohlrabi

LETTUCE

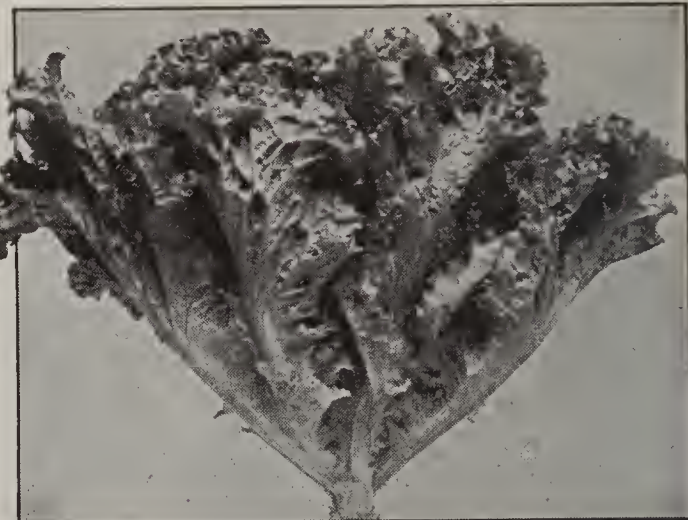
By starting seed for the first crop in the hotbed or in flats in the house in February or early March, and by carefully choosing varieties which will furnish a succession of crops in the garden, one may have fresh Lettuce for the table from May to November. Make the first sowing outdoors as soon as the ground can be put in shape, making the seed-bed as fine and mellow as possible. Scatter the seed in shallow furrows at least 15 inches apart, and cover lightly. As soon as the plants are big enough, thin them out to stand 3 to 4 inches apart. Then, when they begin to touch each other in the row, use alternate plants, leaving 8 to 12 inches, depending on variety, for the remainder to develop. Cultivate constantly. Remember that prompt thinning to provide room, and frequent cultivation are the two great essentials in growing good Lettuce. An occasional sprinkling of nitrate of soda will pay in producing earlier and better crops.

The quickest and easiest Lettuces to grow are the non-heading Loose-leaf or cutting varieties. They are generally preferred for the first sowing outdoors. The Butterhead sorts are second in earliness but first in quality. They do not thrive in hot, dry weather. Use Butterhead varieties for your indoor sowing and for early spring sowing outdoors to succeed the quicker maturing Loose-leaf sorts. They may also be sown in August or early September to mature in the fall. The Crisphead Lettuces require a longer season to mature but are valuable for their comparative resistance to hot weather. Sow these to follow the Butterheads. The Cos or Romaine Lettuces are slow growers but are particularly resistant to heat and drought.

GRAND RAPIDS. An extremely early Loose-leaf variety, requiring cool weather for its proper development. Grown in greenhouses for winter market. Also good for first spring crop in the garden. The plants are large and handsome, with bright green, curled and crinkled leaves. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

EARLY CURLED SIMPSON. An early, medium-large Loose-leaf Lettuce with yellowish green, crumpled and frilled leaves of excellent quality. A splendid early garden Lettuce. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50c., lb. \$1.25.

BLACK-SEEDED SIMPSON. One of the most reliable and productive of the Loose-leaf sorts. The plants are large, with broad, beautifully crumpled and frilled leaves, light green in color and of good quality. Stands more heat than others of its class and is, consequently, desirable for late sowings. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.



Grand Rapids Forcing Lettuce



Big Boston Lettuce. See page 17

OHIO GRAND RAPIDS. An improved variety very much like Grand Rapids except that the foliage is darker green and not so tender. This strain will stand more abuse in handling. One of the best forcing varieties of high-class heads. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

IMPROVED HANSON. Crisp-head type, although it does not make a solid head under ordinary conditions. The plants are of good size; outer leaves medium green, somewhat crinkled; inner leaves blanching white. It grows well in hot weather and remains in good condition for a long time before going to seed. A dependable summer Lettuce. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

GOLDEN CURLED. A very handsome, loose-heading Lettuce with greenish yellow, crinkled and frilled leaves.

Medium size; crisp and tender. Stands warm weather well and is slow to shoot to seed. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

BROWN CHARTIERS. Similar to the preceding but the leaves are tinged with brown. Neither Chartiers nor Golden Curled is recommended for forcing. Pkt. 10c., oz. 20c., $\frac{1}{4}$ lb. 50c., lb. \$1.50.

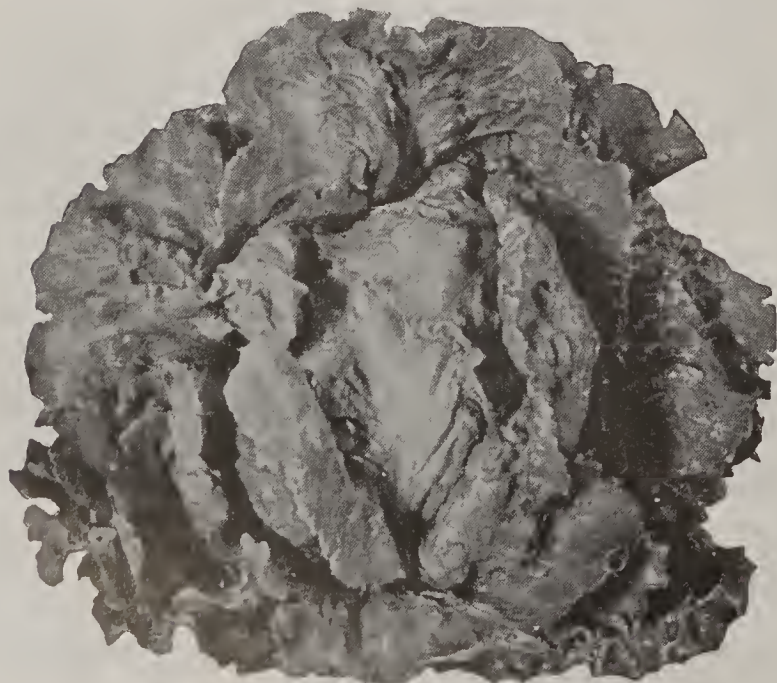
CRISP-AS-ICE. A popular Lettuce of the Crisphead type which makes a solid head of medium size. Being unusually hardy, it is desirable for fall sowing. The outer leaves are dark bronzy green, crumpled and heavy in texture; inner leaves creamy yellow, crisp and sweet. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

WHITE PARIS COS, or Romaine. Distinguished by its tall, upright growth, with long, narrow leaves. The heads are compact and can be blanched to clear white by tying the outer leaves together at the top. Cos Lettuce can be grown in the hottest weather and, when properly blanched, it is crisp, tender, and of excellent flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

ICEBERG. A fine variety for the home-garden. Crisphead type, making a very large, solid head even in warm weather. Outer leaves light green, tinged with brown at the edges; inner leaves white, crisp, firm and sweet. Pkt. 10c., oz. 20c., $\frac{1}{4}$ lb. 50c., lb. \$1.50.

NEW YORK, or Wonderful. The most largely grown of the Crisphead Lettuces. It grows slowly but makes a fine heavy head and remains in prime condition for several weeks. The outer leaves are dark green; the inner blanch to creamy white. Known on the markets as "California Ice Lettuce." Pkt. 10c., oz. 25c., $\frac{1}{4}$ lb. 75c., lb. \$2.

Lettuce continued on next page



New York or Wonderful Lettuce

LETTUCE, continued

MAY KING. An early Butterhead Lettuce of superb quality, and an ideal sort for early spring planting. If grown in cool weather and given ample room and cultivation, it will make very solid heads of medium size, with light green outer leaves and rich golden yellow hearts. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

BIG BOSTON. Where conditions are favorable, Big Boston is a most dependable producer of very large, compact heads of rich buttery quality. It is a favorite with market-gardeners, particularly in the South, but will not ordinarily "head up" for the home-gardener unless it is started indoors or sown very early so as to mature before warm weather. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

BLACK-SEEDED BIG BOSTON. Similar to the original Big Boston which is white-seeded, but a little coarser in growth and stands longer before going to seed. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

WHITE BOSTON. Similar to Big Boston but with slightly lighter green leaves and free from the brownish tint on the outer leaves. Head of medium size and compact, with creamy yellow heart. Excellent quality. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

LARGE SUMMER CABBAGE. A better warm-weather Lettuce than other Butterhead sorts. The heads are large, quite solid, medium green in color, blanching to creamy yellow in the heart, and of fine quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

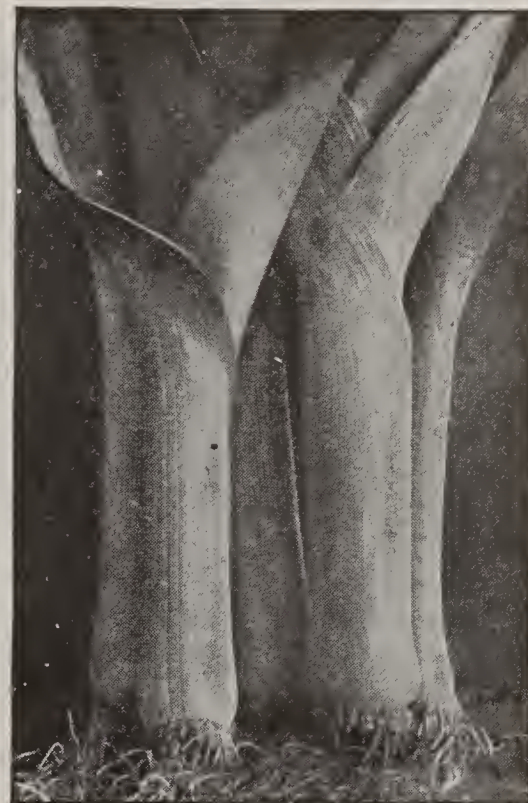
LEEK

This relative of the Onion is grown for its thick leaf-stalks, which resemble a giant young onion. Its pungent flavor is much appreciated by many people, and it is widely used for flavoring soups and stews. A light, moderately rich soil is required for best results. Sow the seed in shallow drills early in the spring and when the plants are about 5 inches high, transplant them 6 to 8 inches apart in rows 15 inches apart, and cultivate frequently. At the time of transplanting it is a good plan to cut back the plants about a third of their height. The stalks are best when blanched by drawing earth up around them.

An ounce of seed will sow 150 feet of row; 4 pounds will produce sufficient plants for an acre

LARGE LONDON FLAG. The hardiest and most generally cultivated variety. Broad stalks of strong flavor. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

MUSSELBURG. Grows larger and is milder in flavor than the preceding. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.



Large London Flag Leek

MUSKMELON

*An ounce of seed will plant about 50 hills;
2 to 3 pounds will plant an acre*

Melons grow best in a light, warm, well-enriched soil. Since they cannot be sown outdoors until warm weather, and require a long growing season, it is a good plan, in this part of the country, to start the seed in a hotbed or box indoors, using inverted sods or dirt-bands, as recommended for early cucumbers. Plant them in the garden, in hills 5 to 6 feet apart, digging the soil to a depth of a foot and mixing in plenty of manure or fertilizer with the bottom soil. In sections where the young plants are troubled with insect pests, it will be necessary to sow an excessive number of seeds with the idea of leaving enough plants to produce a crop after the bugs have done their worst. No more than three or four strong plants should be left in each hill. Hoe frequently at first, taking care not to injure the roots which run close to the surface, but do not disturb after the vines begin to spread.

EXTRA-EARLY HACKENSACK. A large, round melon, slightly flattened at the ends. The skin is ribbed and netted; the flesh is thick, light green in color, and of good quality. Matures earlier than the old type. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

IMPERIAL. (Award of Merit, All-America Seed Trials, 1934, as Sunkist.) Netted yellow fruit with orange flesh. Can be vine-ripened and yet shipped long distances. A fine cropper, even in hot, dry seasons. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

OSAGE, or Miller's Cream. A popular market melon, unusually productive and bears for a long season; does well on soils too heavy for other varieties. The fruits are large, slightly elongated, with lightly netted dark green skin and thick, firm, orange flesh of fine flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

EMERALD GEM. An early, prolific melon. The fruits are small, decidedly flattened and deeply ribbed; the skin is dark green and the flesh is unusually deep and solid, bright orange in color clear to the rind, and of remarkably fine quality. Not a good shipping melon as it remains in good condition but a short time, but a great favorite for home-gardens on light soil. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

TIP-TOP. Probably the most dependable melon for this region. Medium early and productive, bearing large, round, ribbed and netted fruits with thick, sweet, orange flesh. A good market melon and does well on a variety of soils. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

ROCKY FORD. One of the finest quality melons in cultivation. The fruits are medium small, oval in shape, slightly ribbed and covered with a coarse, gray netting. Flesh green and remarkably sweet. Productive but requires a long season. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

HONEY DEW. This melon, recently introduced to American gardens, has come into great favor on account of its extraordinary sweetness. The fruits are very large, with thin, hard, smooth, pale green rind and thick green flesh which remains firm and crisp for a long time. Requires a long growing season. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.



Tip-top Muskmelon

DUST MELONS WITH HAMMOND'S SLUG SHOT. See page 68

WATERMELON

If you have a sunny, sheltered spot in your garden and are willing to take pains to give the plants a good start, you can grow the finest of Watermelons, even in this northern latitude. In general, Watermelons require the same treatment as muskmelons. Start the plants in a hotbed, if possible, to save time, for they require a long growing season. It is not safe to sow seed outdoors until the last of May. Prepare the hills carefully, spacing them 8 to 10 feet apart and digging them deep, mixing in each a couple of shovelfuls of manure or, if manure is not available, a little commercial fertilizer. Humus material of some kind will have to be added if the soil is heavy. Provide in the sowing for a surplus of plants since some of them are pretty sure to succumb to the attacks of insects. To protect the seedlings as much as possible, sprinkle them with arsenate of lead powder or tobacco dust. A top-dressing of manure will keep the soil in the hill warm and moist; water freely in dry spells. When the vines begin to run, pull out all but three or four of the strongest plants.

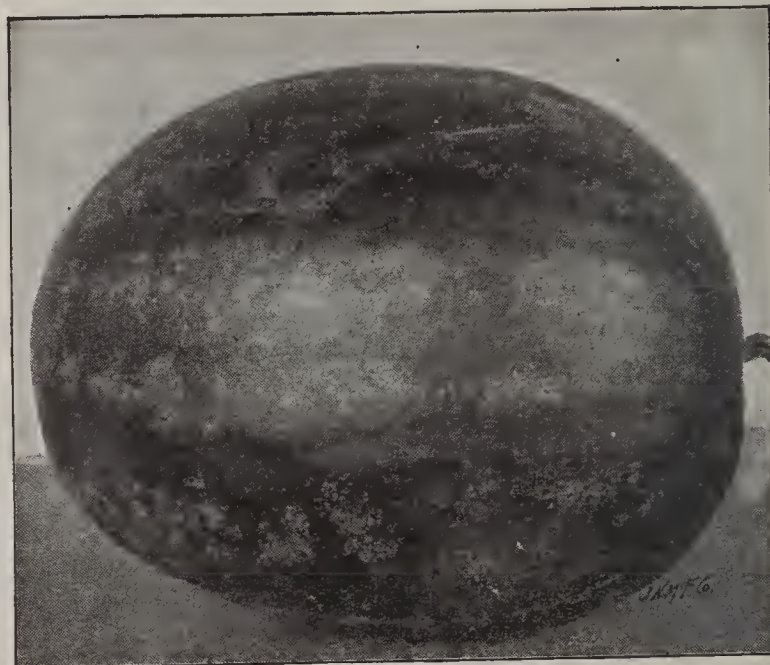
An ounce will plant about 20 hills; 4 pounds will plant an acre

PRIDE OF MUSCATINE. A wilt-resistant variety, especially valuable for sections infested with that disease. Flesh light pink, sweet, and good. In size, general form, and color of the skin, Pride of Muscatine resembles Kleckley Sweets. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

TOM WATSON. The most widely grown variety. Fruits 24 inches long and about 12 inches in diameter, with a thin, tough, mottled green rind and rich red flesh of good quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

KLECKLEY SWEETS. The ideal variety for home-gardens and local markets. The fruits grow about 20 inches long and 10 inches in diameter, with thin green rind and bright scarlet flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

SWEETHEART. Earlier than the above. Large, heavy fruits, more nearly round than the preceding varieties, with a thick, mottled light and dark green rind and firm red flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.



Sweetheart Watermelon



Mushrooms

CITRON

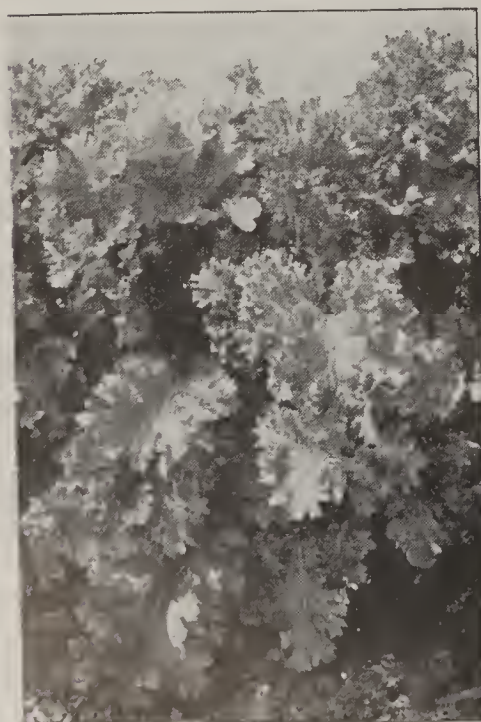
A form of melon used only for preserving as the flesh is not edible when raw. Citrons are grown in the same way as watermelons; they are prolific and not so particular as to soil. Home-preserved Citron is much superior to that handled in the stores in a dried or candied form.

RED-SEEDED. Flesh firm, with comparatively few seeds. Fruits round. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

GREEN-SEEDED. Also called "Colorado Preserving." Fruits large and oblong. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

HORSE-RADISH

MALINER KREN. The largest and most vigorous variety. Plant in early spring in rich, moist soil. Will produce a good crop in one season. Roots, 45c. per doz. (postpaid 55c.), \$2.25 per 100 (postpaid \$2.50), \$15 per 1,000.



Mustard

MUSHROOMS

Anyone who has a cellar or dark room where the temperature can be kept at from 50 to 60 degrees, can grow Mushrooms of surpassing tenderness and flavor. We furnish special printed directions free with each order, or for 25 cents we will send, postpaid, an illustrated booklet on Mushroom culture which gives the latest improved methods of growing as well as full instructions for preparing for market and recipes for cooking.

SPORE-CULTURE MUSHROOM SPAWN, NORTHERN-GROWN. Pure and vigorous. In the form of compressed bricks, each of which will plant about 8 square feet of bed. Brick 30 cts., 10 bricks \$2.50, 50 bricks \$11, 100 bricks \$20. If wanted by mail, add 10 cts. per brick to cover postage; 3 bricks 15 cts., 5 bricks 20 cts.

MUSTARD

The young, tender leaves make piquant salads and are delicious as well as healthful as boiled "greens." Make frequent sowings during the spring months, commencing as soon as the ground can be prepared, in shallow drills 12 to 15 inches apart. Thin out to 10 inches between plants. Mustard can also be forced in frames or in the greenhouse during winter.

An ounce of seed will sow about 75 feet of drill

SOUTHERN GIANT LONG STANDING. The plants grow 2 to 3 feet high, producing quantities of broad, succulent leaves which are handsomely curled and fringed. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

WHITE CHINESE. An improved form of the common White Mustard. Leaves broad and smooth, sweet and pungent in flavor. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

FORDHOOK FANCY. A dark green variety of robust growth, more curled on the edges than any other sort. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

ONION

The average home-gardener is satisfied to grow small green Onions for the table. They are easily grown from seed sown in fine, well-prepared soil early in the spring. The rows should be 12 to 15 inches apart and the seed covered with a little fine soil pressed down firmly above it. When the seedlings are 3 to 4 inches high, thin them out to stand about 2 inches apart. Cultivate frequently.

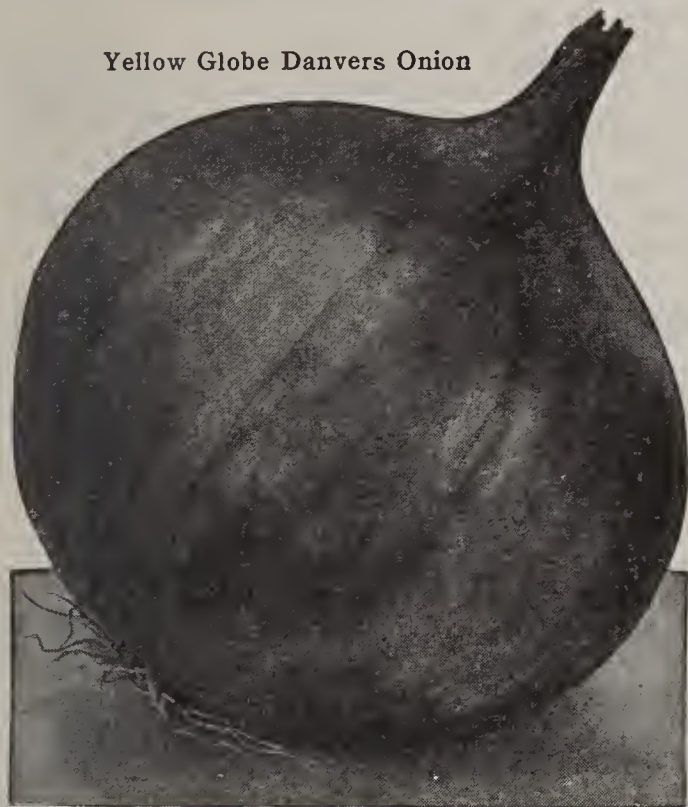
Growing Large Onions from Seed. Poor or heavy soil will not grow good crops of large Onions without the addition of considerable quantities of old rotted manure, humus, and commercial fertilizer; a rich sandy loam or muck soil gives best results. If possible sow seed in hotbeds early in February, thinning the seedlings enough to prevent crowding, and transplanting to the open ground early in May, spacing them 4 to 6 inches apart, depending on variety. If hotbeds are not available, sow the seed in the garden as early as the soil can be put in shape. Thin promptly and keep the hoe or cultivator busy early and late. Keep down the weeds by frequent hand-weeding, if necessary. When the bulbs begin to ripen or show signs of going to seed in the fall, bend over the tops but do not break them off. After digging, let the bulbs thoroughly dry in the sun before storing them away.

An ounce of seed will sow about 100 feet of row; 5 to 6 pounds will sow an acre



Southport White Globe Onions

Yellow Globe Danvers Onion



AILSA CRAIG. One of the largest Onions grown. Globular in form, with pale straw-colored skin and crisp white flesh, very mild in flavor. A heavy cropper and an excellent keeper. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

LARGE RED WETHERSFIELD. The most popular large red Onion for home-gardens and northern markets. Similar in shape and color to Extra-Early Red, but larger and about two weeks later. Productive and an excellent keeper. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

YELLOW DANVERS FLAT. Flat bulbs of good size, with thin necks, ripening down hard and keeping well. Skin is straw-yellow; flesh white, fine-grained and mild. Medium early. Pkt. 10c., oz. 30c., $\frac{1}{4}$ lb. 90c., lb. \$2.50.

YELLOW GLOBE DANVERS. The standard round Onion for eastern markets and probably the most popular all-purpose variety in cultivation. Productive and medium early; bulbs large, solid, nearly globe-shaped, with yellowish brown skin and pure white flesh, crisp, sweet, and mild in flavor. An excellent keeper and a very reliable Onion for home or market use. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$2.75.

PRIZETAKER. A fine selection of the giant Spanish Onion, which will, if planted early and given good cultivation, produce bulbs 4 inches or more in diameter. It makes handsome, uniform, globe-shaped bulbs with thin, pale yellow skin and mild, sweet, white flesh. Prizetaker is a splendid Onion for the home-garden and a good variety to grow for fall and early winter market. Fine for sowing in the hotbed and transplanting. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

YELLOW DUTCH, or Strasburg. An old standard variety. Early; me-

Prizetaker Onion



dium size and flat in shape; quality good. Largely sown to produce yellow sets. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

WHITE PORTUGAL, or Silverskin. A favorite, early, mild-flavored, pure white-skinned Onion, especially desirable for pickling. Full-grown bulbs are large and flat; not a good keeper but extra-fine in quality. If grown for young pickling Onions, sow the seed at the rate of 25 pounds per acre. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

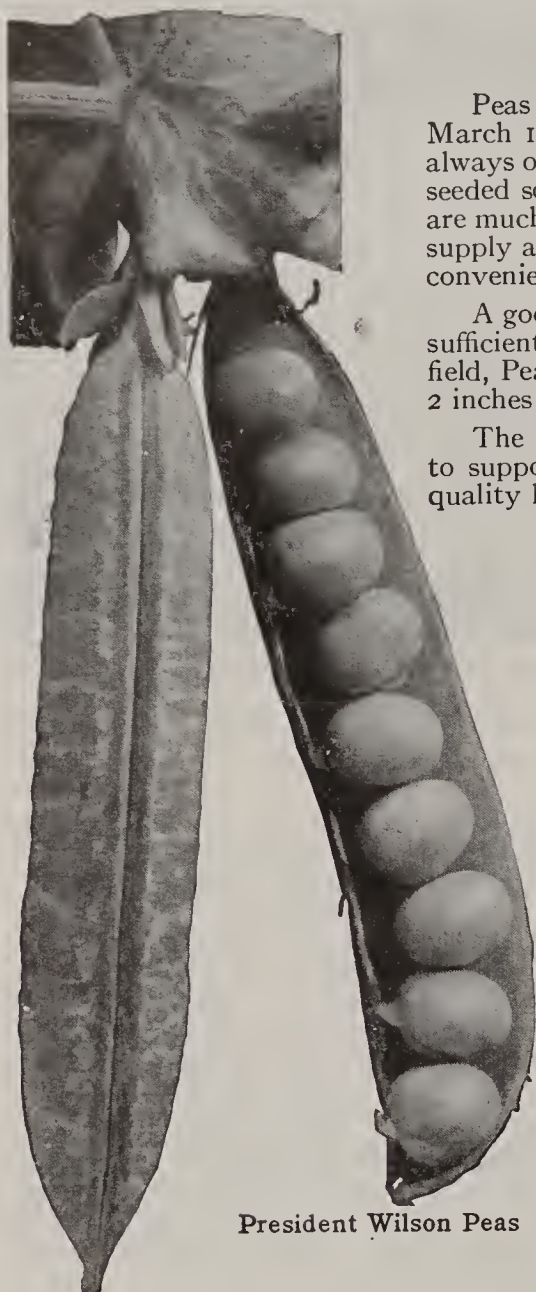
SOUTHPORT WHITE GLOBE. The largest and handsomest of the white Onions, also the best keeper. The bulbs are uniformly globe-shaped with pure white skin and fine-grained, solid flesh of sweet, mild flavor. It grows quickly to the green-Onion stage and is largely sown by market-gardeners for that purpose. Productive and reliable. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

WHITE BUNCHING. A very quick-growing Onion of mild flavor, fine for early spring use. Good size; skin and flesh pure white. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Growing Onions from Sets. By starting with sets, small green Onions can be produced very early and large Onions can be harvested about August 1. Plant sets as soon as the ground is ready; push them into the soil but do not cover them over, allowing 2 to 4 inches of space between, depending on whether small or large Onions are wanted. See page 52.

GARDEN PEAS

INOCULATE THIS
SEED WITH
FARMOGERM



President Wilson Peas

Peas can be sown very early in the spring, the hardy round-seeded varieties even as early as March 1, and, generally speaking, the earlier you start your Peas the better, for the best crops are always obtained before the onset of real hot weather. For the first sowings use the smooth or round-seeded sorts, but after the first of April change to the wrinkled kinds which, although not so hardy, are much superior in quality. Make additional sowings every two weeks up to July 1 for a continuous supply all summer, but arrange to put the May and June plantings on deep, rich soil where you can conveniently water them during dry weather.

A good way to grow Peas in the garden is to plant them in double rows 6 to 8 inches apart, with sufficient space between each pair of double rows to allow for easy cultivating and picking. In the field, Peas are grown in single rows with 3 feet or more between. The seed should be covered about 2 inches deep, or somewhat deeper in warm, dry weather.

The dwarf varieties require no support, but the tall sorts should be provided with bush or wire to support the vines. Generally speaking, the tall varieties are more productive and retain their quality longer, although there are exceptions to this rule.

A quart of seed will sow 100 feet of single row; 1 to 1½ bushels will sow an acre

HARDY ROUND-SEEDED PEAS

CARTER'S EIGHT WEEKS. The earliest and one of the hardiest Peas in cultivation, this comparatively new variety is rapidly becoming a favorite for the first spring crop. The vines are vigorous and extremely productive, growing about 16 to 18 inches high and bearing pods of very good size for so early a sort. Peas large and of fine quality when young. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

MARKET SURPRISE. An unusually large-podded, extra-early sort, growing 2½ to 3 feet tall. It is about the same season as Alaska, being several days later than Eight Weeks, but the pods are larger and Peas of better quality. A reliable variety for both home and market-gardens. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

ALASKA. A very productive smooth Pea, long in favor with market-gardeners and canners. About 2½ feet tall; pods rather small, ripening all at once; Peas small and of medium quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

EARLY WRINKLED PEAS

PIONEER. A very productive and reliable dwarf Pea, one of the earliest of the wrinkled kinds. The vines grow about 16 inches tall, bearing very large, curved pods, medium green in color, filled with large Peas of fine quality. ½pt. 20c., pt. 35c., qt. 60c., pk. \$3, bus. \$10.

LAXTONIAN. The acknowledged leader in quality among early dwarf Peas and one of the best varieties for the home-garden. Of the same general type as Pioneer but a trifle taller and the pods and Peas are darker green. Quality of the best. Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

WORLD'S RECORD. The earliest wrinkled Pea, and one of the most popular varieties for both market and home plantings in this section. It closely resembles the old standard Gradus; in fact, might be called an extra-select strain of that variety, but is a few days earlier and the pods are a shade smaller. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

GRADUS, or Extra-Early Telephone. A grand old standby, second only to World's Record in earliness and a most dependable producer under all conditions and for all purposes. Vines 3 feet high; pods about 4 inches long, broad and slightly curved, containing 7 to 9 Peas of excellent quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

THOMAS LAXTON. As early as Gradus and grows to the same height. The pods are a little shorter and more blunt but they are always crammed full of large, tender Peas of most superb quality. Desirable for the market-garden. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

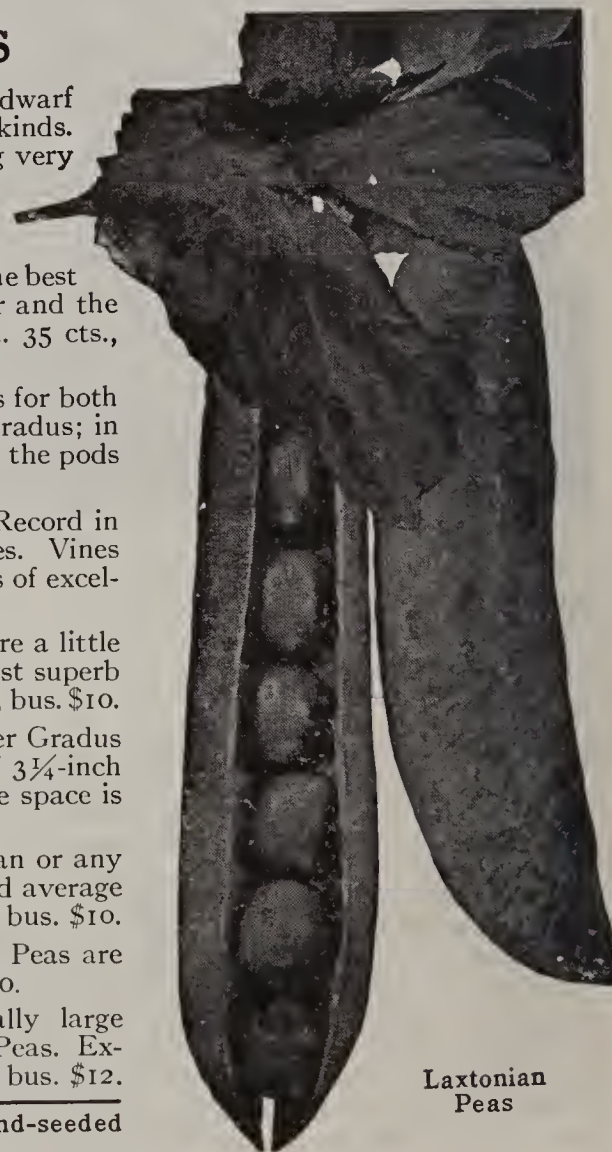
LITTLE MARVEL. A very dwarf, large-podded variety which comes into bearing after Gradus and just before Laxtonian. The vines grow about a foot high and bear big crops of ¾-inch pods, containing large Peas of excellent flavor. A good Pea to plant in gardens where space is limited. Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

LAXTON'S PROGRESS. This dwarf, early sort comes in much earlier than Laxtonian or any other Pea of its class. The Peas are deep green, of excellent flavor, fully wrinkled, and average 9 to 10 to the pod. Grows 18 inches high. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

NOTT'S EXCELSIOR. Same height and season as Little Marvel but the pods and Peas are smaller. Good quality and very prolific. ½pt. 20c., pt. 35c., qt. 60c., pk. \$3, bus. \$10.

PRESIDENT WILSON. A handsome, second-early, dwarf variety, with exceptionally large pods. Vines very dark green. Pods rich deep green, containing 8 to 9 large, succulent Peas. Excellent for home- and market-garden. ½pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$12.

NOTE: One pint of Peas weighs about 1 lb. and 1 quart about 2 lbs. One bushel of round-seeded varieties weighs 60 lbs. and 1 bus. wrinkled varieties weighs 56 lbs.



Laxtonian
Peas

MIDSEASON AND LATE WRINKLED PEAS

POTLATCH. Productive main-crop Pea of special value to the home-gardener on account of its dwarf growth and extra-fine quality. Vines luxuriant, 2 feet high; pods deep green, 5 inches long and quite broad; Peas large and tender, often 10 to a pod. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

DWARF TELEPHONE. Also known as "Daisy." A little earlier than Potlatch, growing 2½ feet tall, with 4½-inch pods, containing 7 or 8 Peas of the very best quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

PRINCE EDWARD. One of the newest in this class and probably the most productive. Matures with Telephone; vines medium green, pods dark green in color. Highly recommended to market-gardeners and for late use in the home-garden. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

IMPROVED TELEPHONE. The best strain of this well-known standard variety. The vines are vigorous, growing 4 feet high, with broad, heavy leaves and broad pods, 4½ inches long, light green in color, and well-filled with 8 to 10 extra-large Peas. Bears several good pickings. Quality fine, the Peas remaining tender and sweet for a long time. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

ALDERMAN. Perhaps the best all-round of the Telephone type. Vines strong and vigorous; leaves and pods rich dark green; productive; quality the finest; matures with Telephone. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

MAMMOTH-PODDED SUGAR. A tall, late, prolific variety which produces big, broad pods, so tender and sweet that the whole pod can be cooked and served like snap beans. If you have not grown sugar-pod Peas, be sure to try them this year. ½pt. 25 cts., pt. 40 cts., qt. 75 cts., pk. \$4.25, bus. \$15.



Pioneer Peas. See page 50

PEPPER

An ounce of seed will produce about 1,500 plants

Peppers require a moderately rich and light soil, a long growing season, and plenty of warmth at all stages. Grow them like egg-plants, starting the seed indoors or in the hotbed in March, transplanting to pots or dirt-bands when the second or third leaf has developed, and resetting in the garden about June 1. Space the plants 2 to 2½ feet apart.

RUBY KING. An early and productive, true sweet Pepper. The fruits, when ripe, are bright red, averaging 4 inches in length and 3 inches in diameter, tapering to a blunt point. The flesh is quite thick and sweet. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1, lb. \$3.

WORLD BEATER. A fine, new selection of the Ruby Giant type. Later but larger and a little more blocky in shape than Ruby King; flesh quite thick and sweet; bright scarlet when ripe. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

RUBY GIANT. Thick-fleshed and, next to Chinese Giant, the largest of the sweet Peppers. Early, reliable, and fairly productive. Deep green, changing to rich red when ripe. Handsome Pepper of fine quality. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

SWEET SPANISH. A large, rich scarlet Pepper of exceptionally mild flavor. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1, lb. \$3.

BULL NOSE. Largely grown by market-gardeners on account of its productiveness. Fruits deep green, becoming vivid scarlet as they mature, medium in size, square and blunt-pointed. Generally considered a sweet Pepper but the flesh is often strong in flavor and sometimes quite hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

PIMIENTO. A select strain of the famous Spanish Pepper, the thickest-fleshed and choicest quality variety in cultivation. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

HARRIS' EARLY GIANT. Large, early variety about 4 inches long by 3 inches through. It is deep green, turning to red, and of sweet, pleasant flavor. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

CALIFORNIA WONDER. Has thicker, firmer, heavier flesh than any other Pepper, and a deliciously sweet spicy flavor with no bite to it. Fruits are bright green, changing to brilliant light crimson, and are ideal for stuffing because of their blocky shape. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

NEAPOLITAN. A solid, mild Pepper 4 inches long by 2 inches in diameter, and tapering irregularly from the shoulder. It is green when young and glossy red when ripe. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

CHINESE GIANT. The largest of all Peppers, the fruits often measuring 5 inches in length and diameter. Late but productive; flesh thick and very mild and sweet; deep red when ripe. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.

LONG RED CAYENNE. Pods about 6 inches long, slender and pointed, bright scarlet; flesh very hot in taste and pungent in odor. Pkt. 10 cts., oz. 50c., ¼lb. \$1.25, lb. \$4.

SMALL RED CAYENNE. Bushy plants, loaded with little, slender pods, about 1½ inches long. Fiery hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

LARGE RED CHERRY. Fruits erect, round or cherry-shape and very hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

HUNGARIAN WAX. Fruits about 5 inches long and 1½ inches in diameter at stem end, tapering to a point. Waxy yellow and red when ripe. Hot. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.

SQUASH or TOMATO. Sweet as an apple; shaped like a tomato; 2 to 3 inches in diameter. Deep red. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

SQUASH or TOMATO, HOT. Like the preceding except that it has a much stronger flavor. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

ANAHEIM CHILI. Late, hot variety for canning and drying. Fruits 6 to 8 inches long, 1 inch diameter. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

GOLDEN QUEEN. The largest, most productive, and finest yellow-fruited Pepper. Very heavy, unusually meaty, and strictly mild. Glossy golden yellow skin. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.



World Beater Pepper



Onion Sets

hardy and may be planted as early as the ground can be prepared. Place your order early, specifying which variety you want. Postpaid: 50 cts. per 100, \$1.60 for 500, \$3 per 1,000. Special prices on larger quantities.

ONION SETS

We carry an extra-choice grade of Onion Sets in both white and yellow sorts. Prices quoted below are subject to change. Ask for special quotation on large quantities.

WHITE. Qt. 25 cts., pk. \$1.35, bus. \$4.25.

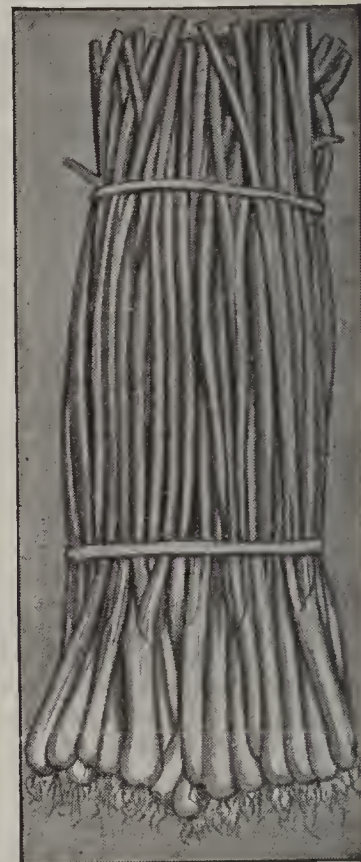
YELLOW. Qt. 20 cts., pk. \$1.25, bus. \$4.

POTATO ONION SETS. Qt. 40 cts., pk. \$2.25, bus. \$7.

GARLIC SETS or BULBS. Qt. 50 cts., pk. \$3.

ONION PLANTS

These young plants of the Prizetaker and White or Yellow Bermuda Onions start into growth more quickly and grow more vigorously than dormant sets, and they make very smooth, handsome Onions of uniform size and shape, good sweet flavor, and excellent keeping quality. They are cheaper than sets, quality and yield considered. Perfectly



Onion Plants

OKRA or GUMBO

Grown for its seed-pods, which are pickled when young, before they get tough, and used for flavoring and thickening soups. Popular in the South. Sow late in May, in drills about an inch deep and 2½ feet apart and thin out to about 1 foot apart in the row. For an early crop, start seed in the hotbed late in March.

One ounce will sow about 25 feet of row; 20 pounds will sow an acre

LONG GREEN. A tall-growing variety which bears quantities of deep green pods that average 4 to 5 inches in length at the edible stage. Slow to ripen. Pkt. 10c., oz. 15c., ¼lb. 25c., lb. 75c.

DWARF PROLIFIC. Early and, as the name implies, low in growth and productive. Pods of medium size; light green. Pkt. 10 cts., oz. 15 cts., ¼lb. 25 cts., lb. 75 cts.



Moss Curled Parsley

PARSLEY *An ounce of seed will sow 150 feet of drill; 8 pounds will sow an acre*

Everyone wants a little bed of Parsley for flavoring and garnishing. Choose a rich, mellow spot and sow the seed as early in the spring as possible, in drills about a foot apart and half an inch deep. The seed is very slow to germinate, sometimes requiring six to eight weeks. Soaking it in luke-warm water for a few hours before sowing will help to hasten it. When the plants are strong enough, thin them to stand about 4 inches apart. Parsley beds may be carried over winter in a frame or by mulching with leaves or straw.

DOUBLE-CURLED. A compact-growing variety with bright deep green leaves that are beautifully curled and fringed. The most attractive Parsley for garnishing. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts.

CHAMPION MOSS CURLED. A hardy and vigorous sort that can be cut the year around. Leaves attractively crimped and curled. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts.

PLAIN or Single. The leaves are deeply cut but not curled. Much stronger in flavor than the curled sorts and, on this account, preferred for soups, etc. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts.

HAMBURG TURNIP-ROOTED. Grown for its roots, which resemble short, thick parsnips and are highly flavored; useful in soups and stews. Grown like carrots. The roots can be stored for winter use. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts.

PARSNIP *An ounce of seed will sow 150 feet of row; 8 pounds will sow an acre*

A deep, fine but not necessarily rich soil is best for Parsnips. Spade it deep and pulverize it well, as early as the ground can be worked. Sow the seed in drills 1½ feet apart and half an inch deep, and when the plants are well up thin them out to stand about 6 inches apart. Cultivate frequently. The roots mature in the fall and, being perfectly hardy, may be left in the ground all winter, to be dug as needed. Their flavor is improved by freezing.

HOLLOW CROWN. A standard table variety, producing long, smooth roots with white skin and fine-grained flesh. Productive and reliable. Pkt. 10c., oz. 15c., ¼lb. 35c., lb. 85c.

GUERNSEY. Thicker at the top and not quite so long as the preceding; consequently, a better variety to grow on shallow soils. Good quality. Pkt. 10c., oz. 15c., ¼lb. 35c., lb. 85c.

MALTESE HALF-LONG. An early variety of particularly fine quality. Roots rather short and thick. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts.

WHITE LISBON. The largest and most handsome variety. Resembles Hollow Crown but the roots are smoother and whiter. Fine quality. Pkt. 10c., oz. 15c., ¼lb. 35c., lb. 85c.



Hollow Crown Parsnips



Mammoth Golden Cushaw Pumpkin

PUMPKIN

The seed should be sown as soon as the ground gets warm, usually during the latter part of May in this section. Pumpkins are sometimes grown in corn, but for table use it is customary to plant them in hills 6 to 8 feet apart, dropping from four to eight seeds in each hill. It is a good plan to pinch back the vines after they get 4 to 5 feet long. If you want extra-large specimen fruits, dig plenty of manure into the hill before planting and permit only one or two

fruits to mature on each plant. Spray the vines with Nicotine Pyrox.

One ounce of seed will plant about 25 hills; 4 to 5 pounds will plant an acre

WINTER LUXURY. The Pumpkin that makes the real old-time Pumpkin pies. Flesh golden russet color, of extra-fine flavor. Pumpkins medium size, with netted skin. Unusually fine sort. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

TENNESSEE SWEET POTATO. Sweet, tender, yellow flesh. One of the extra-good pie Pumpkins. Bell-shaped in form. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

MAMMOTH GOLDEN CUSHAW. A large crookneck variety with golden orange skin and deep, rich yellow flesh of the very finest quality. A productive sort and largely grown for table use. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

LIVINGSTON CUSHAW. An old standby and a great favorite for pies. Crookneck shape; skin mottled green and white; flesh yellow, fine-grained and sweet. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

SMALL SUGAR. Small but productive and of splendid quality. Fruits round with bright orange skin and thick, sweet flesh. Undoubtedly the best table Pumpkins for the small garden. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

LARGE CHEESE. Big, flat, handsome Pumpkins with light buff skin and yellow flesh. Prolific; largely grown for market and canning. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

KING OF MAMMOTHS. Suitable for table use and splendid for pies. Can also be used for stock-feeding and often grown for exhibition purposes. Round, flattened at the ends, with golden orange skin and deep yellow flesh of fair quality. A good keeper. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CONNECTICUT FIELD. The common big field Pumpkin. Very productive; fruits oblong in shape, with bright yellow skin and rather coarse flesh. Usually grown for stock. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts., 5 lbs. \$3.50.

MAMMOTH TOURS. Grows to an enormous size, fruits often weighing 100 pounds or more. Skin mottled green; flesh yellow, rather coarse. Used principally for stock-feeding. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.



Small Sugar Pumpkin



Winter Luxury Pumpkin

KENTUCKY FIELD. Fruits a little smaller and more round in shape than the preceding. Flesh of better quality and suitable for table as well as stock. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts., 5 lbs. \$3.50.

RHUBARB

Rhubarb gives best crops on deep, light soil which has been liberally enriched with manure. It is cheapest to start with seed but only a percentage of the plants grown from seed will be worth saving. Sow early in the spring, in drills an inch deep and a foot apart, and thin the plants to stand about 5 inches apart. The following spring, reset the best plants 3 to 4 feet apart each way. If you start with roots, plant them with the crown about 1 inch below the surface. Cultivate Rhubarb frequently and keep the weeds out. Give water, if needed, while the plants are producing and dress with manure every year after the cutting season is over. The first pulling may be made the second season after planting and the plant will continue to bear for many years.

VICTORIA. This is the best all-round variety. Productive and comes fairly true from seed. Seed, pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2. **Roots**, 15 cts. each, \$1.50 per doz.; postpaid, \$1.75 per doz.

SALSIFY

Often called "Vegetable Oyster" or "Oyster Plant" on account of its flavor. Salsify is easy to grow on any good garden soil. Spade to a depth of a foot or more and make the soil as fine as possible. Sow the seed early, as the plants require a long season to attain full size; cover about an inch deep, in rows 12 to 15 inches apart, and thin the plants to 3 inches apart in the rows. Roots may be left in the ground all winter and dug as needed.

One ounce of seed will sow about 50 feet of drill; 10 pounds will sow an acre

MAMMOTH SANDWICH ISLAND. The best variety. Roots often 10 to 12 inches long, tender, and of delicious flavor. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.



Mammoth Sandwich Island Salsify

RADISHES

Everybody can and everybody wants to grow Radishes. Most any soil will do; if it is light and mellow so much the better. An extra-early crop can be grown in the hotbed from seed sown in February or early March. Start outdoors as soon as the ground can be put in shape and sow seed of any of the quick-growing round or olive-shaped sorts, not too thick, in drills a half inch deep and 1 to 1½ feet apart. Thin out the seedlings promptly to stand about an inch apart in the rows. Keep them growing fast by hoeing or cultivating every two or three days, otherwise they become pithy and bitter. After putting in seed for the first crop, make additional sowings every ten days to two weeks, but for the later crops, which will ripen in warm weather, use the long varieties. For late summer and fall use, sow the Summer and Winter Radishes which are larger and slower growing but will, unlike the early round Radishes, thrive in hot weather. The Summer Radishes may be sown any time up to August 1. The big Winter Radishes should be sown late in June to attain full size before frost.

One ounce of seed will sow about 100 feet of drill; 8 to 10 pounds will sow an acre

EARLY WHITE-TIP FORCING. A very attractive little Radish for forcing in frames or for early spring planting. Round, bright scarlet with clear white tip; small leaves. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

EARLY SCARLET TURNIP. Roots of medium size, round, smooth, bright red; tops small. Grows quickly and is one of the old standbys for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

NON PLUS ULTRA. The earliest forcing Radish in general use, ready for the table in 20 days from planting. Roots small, uniformly globe-shaped, and smooth, with brilliant scarlet skin and crisp white flesh. Fine for early sowing outdoors as well as for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.



Early Scarlet
Globe Radishes

EARLY SCARLET GLOBE. One of the most popular Radishes for early use. Matures medium-sized, elongated, globe-shaped, clear rosy scarlet roots in about four weeks from sowing. Quality fine; a reliable variety for forcing and always in demand. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

FRENCH BREAKFAST. An oblong or olive-shaped Radish of very fine quality. Early; bright carmine with clear white tip. Good for forcing and fine for the home-garden. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

CRIMSON GIANT. The largest of the early, round Radishes, maturing in about four weeks from sowing. Handsome, deep red, globe-shaped roots. Good for forcing and fine for the home-garden. Remains crisp and mild longer than other early sorts. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

ICICLE. If you grow only one kind of Radish in your garden, you will be safe in choosing Icicle. It grows quickly, making handsome, long, smooth roots with pure white skin and crisp, mild flesh. Being more resistant to heat than other early Radishes, it is reliable for either spring or summer use and retains its crispness and flavor for a long time after it becomes ready for use. Suitable also for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

COPENHAGEN MARKET. A short-leaved, round, red sort, with the lower part white. Excellent both for forcing and outdoors. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

CINCINNATI MARKET. In shape much like Long Scarlet Short Top but a little longer and with a very small top. Skin rosy scarlet; flesh clear white, very brittle and mild. Popular for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

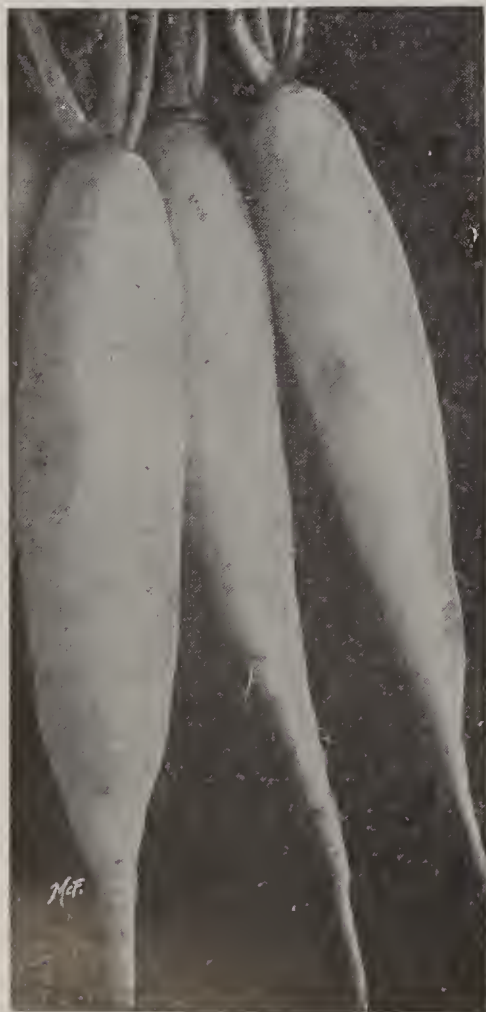
SUMMER RADISHES

WHITE LADY FINGER. Resembles Icicle but grows more slowly and is particularly desirable for late sowings as it retains its fine, crisp quality for a long time even in the hottest weather. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

CHARTIER, IMPROVED. A splendid variety to plant for second-early, being intermediate in season between the early and the Summer Radishes. Roots 7 to 8 inches long, bright rose with white tip. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

WHITE STRASBURG. A long, oval Summer Radish of handsome appearance; a leading variety for market. Roots about 5 inches; skin and flesh pure white; remains firm and brittle longer than most sorts. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

WHITE STUTTGART. A large, late, pure white kind, with almost round or top-shaped roots 4 inches in diameter. Of good quality and a good keeper. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.



Icicle Radishes

RADISHES CONTINUED ON NEXT PAGE

WINTER RADISHES

LONG BLACK SPANISH. One of the hardiest and best keeping sorts. Roots 7 to 9 inches long and 2 to 3 inches in diameter at the top, tapering to an abrupt point. Skin black; flesh clear white and of fine quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

LONG WHITE SPANISH. Exactly like the preceding except in color of skin. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

ROUND BLACK SPANISH. Similar to the Long Black Spanish. Roots nearly round, 3 to 4 inches in diameter. The round shape is preferred in some markets. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

CELESTIAL, or White Chinese. Grows more quickly than the Spanish types; roots handsome, cylindrical in shape, often 8 inches long and 3 inches in diameter; skin and flesh pure white. Of fine quality and a good keeper. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

CHINESE ROSE. Roots 4 to 5 inches long, cylindrical, or larger near the bottom; skin smooth, bright rose in color; flesh white, crisp and tender. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

SPINACH

One ounce of seed will sow about 100 feet of drill; 14 to 15 pounds will sow an acre

From the standpoint of health, there are few vegetables more valuable than Spinach. Room should be made for it in every garden, small or large. It is easy to grow but should have a moderately rich, well-dug soil. Start the first crop in drills an inch deep and 15 inches apart as soon as the ground can be made ready in the spring, and follow this with successive sowings every ten days up to the middle of May. Make additional sowings in August and September for fall use. Thin the plants to stand about 5 inches apart. To provide Spinach during hot weather, when ordinary varieties do not thrive, make a sowing of the heat-resistant New Zealand Spinach about May 1. For extra-early Spinach in the spring, sow one of the hardy sorts late in September and protect the plants over winter.

BLOOMSDALE SAVOY-LEAVED. (Reselected.) Very hardy and consequently, most desirable for autumn and early spring use. The plants are upright and vigorous, with thick crumpled leaves. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.



Summer Green Spinach



Bloomsdale Savoy-leaved Spinach

TRIUMPH OR LONG SEASON. A large-growing variety which stands for a long time before going to seed. Leaves broad, somewhat crumpled, tender, and of fine flavor. For spring and early summer. Oz. 10c., $\frac{1}{4}$ lb. 20c., lb. 45c., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

VICTORIA. Another variety of the Triumph type, which stands hot weather better than other sorts and is slow to go to seed. Leaves very large and thick, deep green in color, and of superior quality. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

IMPROVED LARGE ROUND THICK-LEAVED. A hardy, vigorous sort, particularly valuable to market-gardeners for early spring sowing. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

KING OF DENMARK. A very fine Spinach which stands a week or two longer before shooting to seed than any other sort. Leaves are thick, crumpled, and dark green. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

JULIANA. A good second-early variety that grows close to the ground and has dark green, crumpled leaves that keep fresh-looking and retain their crispness a long time after being cut. Stands well. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

SUMMER GREEN. This new variety has become very popular and will replace Bloomsdale Long-Standing as it gives more satisfactory results. Nearly as early and quick-growing as Bloomsdale but stands in marketable condition 10 to 14 days longer before bolting. Leaves intensely crumpled, blistered and very uniform, deep glossy green. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

BLOOMSDALE (LONG-STANDING). A very early, blight-resistant, hardy sort that is much planted for market and canning. Leaves curled and wrinkled. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

VIRGINIA SAVOY-LEAVED, BLIGHT-RESISTANT. This is a cool-weather variety that is resistant to "yellows" and mosaic disease, and has distinctly savoyed leaves. Matures in 35 days. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

NEW ZEALAND. A distinct type of Spinach which makes large, bushy plants, often 3 feet in diameter. Only the young leaves and tips of the branches are used and the more they are picked, the faster the plant seems to grow. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25, 10 lbs. \$4.

SWISS CHARD. See page 37

SQUASH

One ounce of Squash seed will plant 15 to 20 hills; 3 to 5 pounds will plant an acre, according to variety

In general culture the Squashes are much like the melons, but they do not require such a long growing season and are more dependable producers. Best results are secured on light soils which have been heavily manured. Sow the seed in hills, about 4 feet apart each way for the summer varieties and 10 to 12 feet for the late or winter sorts. Do not sow, however, until the soil is warm and dry—the end of May is about right in this section. Use plenty of seed in each hill, twelve to fifteen anyway, to provide against the inevitable losses from insects; after the plants get a good start pull out all but four or five. The Squash vine borer may cause some trouble during the season but can be discouraged by sprinkling tobacco dust close around the plants. Covering the vines with a little soil at several joints so that they take root there will also help to limit its destructiveness. The black Squash bug can best be kept in check by hand picking; spraying with calcium arsenate is the proper remedy for the striped beetle.

MAMMOTH WHITE BUSH. One of the earliest and most popular of the Summer Squashes. Compact in growth and prolific, with ivory-white fruits, round with scalloped edges. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

YELLOW SUMMER CROOKNECK. An old favorite. Long, curved fruits with thin, golden yellow, warted skin; sweet, tender flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.



Mammoth White Bush Squash



Hubbard Squash

COCOZELLE (Italian Vegetable Marrow). Bushy plants, requiring little space, produce many oblong fruits averaging a foot long; green skin, mottled and striped with yellow and darker green. Quality extra-fine. Pkt. 10c., oz. 20c., $\frac{1}{4}$ lb. 50c., lb. \$1.50.

FORDHOOK. An excellent variety, suitable for both summer and winter use. The fruits are oblong, 8 to 10 inches long, with thin, light yellow skin and thick, straw-colored flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

BOSTON MARROW. A productive late variety, generally considered the best for canning and for pies. It is shaped like the well-known Hubbard, with orange skin and thick flesh. A good keeper. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

ACORN (Table Queen). A small thin-skinned, greenish black Squash with dry, mealy flesh of wonderful flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

BLACK ZUCCHINI. Cylindrical and of uniform thickness; rind dark green; flesh firm and of delicate flavor. Pkt. 10c., oz. 20c., $\frac{1}{4}$ lb. 50c., lb. \$1.25.

IMPROVED HUBBARD. A selection from the old Hubbard, with more vigorous vine and slightly larger fruits. Skin smooth, dark green; flesh deep yellow and of superb quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

WARTED HUBBARD. Similar in size and shape to the Improved Hubbard, but the skin is heavily warted and very dark green, almost black, in color. The best keeper of the Hubbard type. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

GOLDEN HUBBARD. True Hubbard shape but earlier, a trifle smaller, and the skin is a rich orange-red in color. Flesh deep orange, dry and sweet; an excellent keeper. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

HERBS

Grandmother's garden always had a little patch of herbs and, doubtless, much of the savoriness of grandmother's cooking as well as the effectiveness of her home remedies was derived from her store of "yarbs." Most of the commoner herbs are perennials, although they last but a few seasons in ordinary situations. Any odd corner will do, provided it is sunny and the soil not too hard or poor. Sow seed in early spring, thinning out as needed. The seeds of many herbs are slow and irregular in germinating.

ANISE. Used principally for flavoring and for garnishing. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

BALM. Used for making a medicinal tea. Pkt. 10 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

SWEET BASIL. A highly aromatic herb whose leaves and tops are used for seasonings and, in a limited way, in salads. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

BORAGE. An annual plant that is used freely by bee-keepers. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

CARAWAY. The seeds of this plant are used for culinary purposes, in confectionery and also in medicines. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

CARDOON. Grown somewhat like celery and served like asparagus. Pkt. 10 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.25, lb. \$4.

CHIVES. Used as a substitute for onions in soups and salads. Pkt. 25 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

CORIANDER. An annual whose seeds are strongly aromatic. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

CURLED CHERVIL. Leaves of Chervil very much resemble those of parsley and are used in a similar way. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

DILL. An annual plant, seeds of which are used as a seasoning and also in the preparation of Dill pickles. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.

FLORENCE FENNEL. A very delicious salad vegetable. It can be served like celery or boiled. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

HOREHOUND. Annual; chiefly used for medicinal purposes, as it has strong tonic properties. Pkt. 10 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.25, lb. \$4.

LAVENDER. Dried flowers impart a pleasing odor to the contents of linen-chests. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

SWEET MARJORAM. Pleasingly fragrant and of particular value as a seasoning. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

RUE. A medicinal plant of extremely pungent taste. Pkt. 10 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

SAFFRON. Cultivated for medicinal purposes. Pkt. 10 cts., oz. 25 cts.; $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

SAGE. An old familiar herb with a pungent odor. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

SUMMER SAVORY. Dried foliage used for flavoring during the winter months. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

SWEET FENNEL. The leaves are finely cut and are used for garnishing. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

THYME. The leaves and young branches are used for seasoning. Pkt. 10 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

WORMWOOD. Has medicinal qualities. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.



Purple-Top Strap-Leaf Turnip

EXTRA-EARLY WHITE MILAN. The quickest growing of the Turnips, largely used for spring sowings. The roots are small and flat with pure white skin and flesh; mild and sweet. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.

YELLOW GLOBE. Round, smooth roots of medium size, with light yellow skin and flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

COW HORN. Roots shaped rather like a carrot, often over a foot long and 3 inches in diameter, with a considerable part of their length above ground. Skin and flesh white. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts., 5 lbs. \$3.25.

SEVENTOP. A variety widely grown throughout the South in regions of milder winters. Used extensively for winter greens. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

RUTABAGA or SWEDE TURNIP

Rutabagas are grown much like garden Turnips but they require a longer season and attain a larger size. Sow during June or early July in rows 15 to 18 inches apart and thin out to 8 to 10 inches. Where the summers are temperate an early crop can be grown from spring sowings. Although largely grown for feeding to stock, Rutabagas are considered by many to be superior to Turnips in table quality and they are particularly good winter keepers. Dig the roots before the ground freezes and store in a cold cellar or in pits outdoors.



Improved Purple-Top Rutabaga

SWEET GERMAN. A large, globe-shaped variety with white skin and flesh. Fine-grained, solid and sweet, lacking the strong taste which many Turnips develop. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

IMPROVED PURPLE-TOP. Hardy and productive, with large, globular roots, very uniform in shape and size. Skin smooth, light yellow with purple top; flesh yellow, firm, and of fine quality. Can be stored in good condition all winter and well into the following summer. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

TURNIPS

Any ordinary garden soil will produce good crops of Turnips. Freshly manured land should not be used, but deep digging and thorough preparation are essential to produce smooth, well-flavored roots. As Turnips develop best in cold weather, the main crop is usually sown in July or August, to mature during the fall, but early-season crops can be obtained by sowing the quick-maturing varieties as soon as the ground can be prepared in the spring. Sow in drills 12 to 15 inches apart and cover firmly with about $\frac{1}{2}$ inch of soil. Scatter the seed thinly so as to reduce the amount of thinning required when the plants are 2 to 3 inches high. The early sorts should stand 3 to 4 inches apart in the rows and the large main-crop Turnips about 6 inches. The roots may be stored like beets for winter use, if dug before hard frost.

An ounce of seed will sow about 100 feet of drill; a pound will sow an acre

PURPLE-TOP STRAP-LEAF. A quick-growing variety desirable for both early and late planting. The roots are flat and quite large; skin white except for a ring of purple around the top; flesh white, fine-grained and of excellent table quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts., 5 lbs. \$3.25.

PURPLE-TOP WHITE GLOBE. The standard main-crop Turnip for market and often grown for feeding to stock. The roots are large, nearly round, white with upper third purple. The flesh is firm and of good quality. Productive and a splendid keeper. Pkt. 10c., oz. 15c., $\frac{1}{4}$ lb. 35c., lb. 90c., 5 lbs. \$4.



Purple-Top White Globe Turnip

TOBACCO

For best results, Tobacco requires a rich, mellow soil and careful cultivation. Sow the seed in frames or a fine seed bed early in April and reset the plants in the open ground late in May or early in June, spacing them 2 feet apart in rows 4 feet apart. Cultivate frequently.

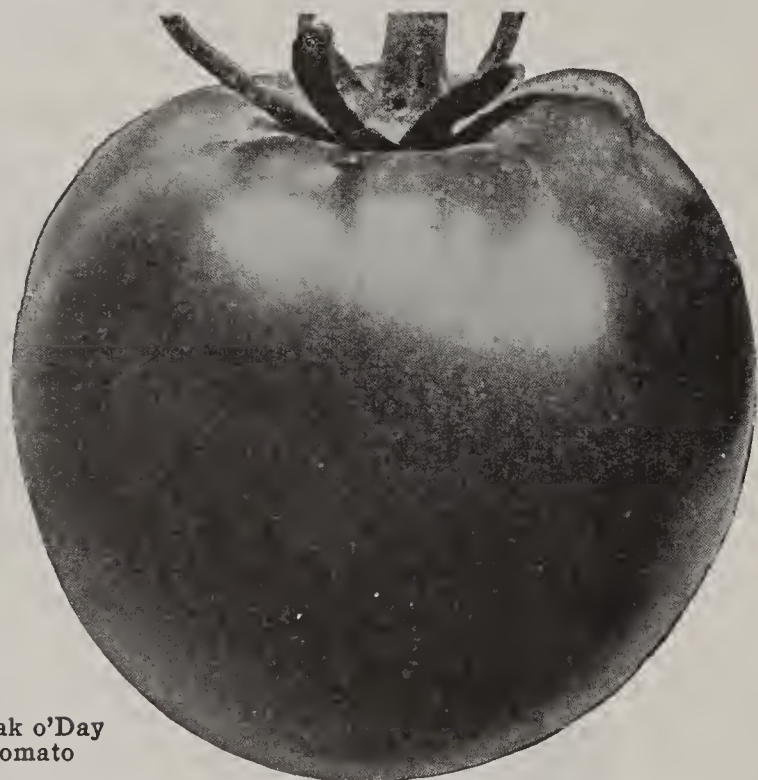
CONNECTICUT SEED-LEAF. One of the hardiest and most popular sorts. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75.

HAVANA. True type; productive and of finest quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75.

TOMATOES

An ounce of seed will produce about 2,000 plants;
4 ounces should give sufficient plants for an acre

Thriving in any soil, and producing the most bounteous returns in small space, Tomatoes are an ideal crop for the home-garden. They should have plenty of sunlight and moisture but are not at all particular as to soil. The seed should be sown indoors in late February or March, in shallow boxes or pots placed in a warm, sunny window. As soon as the little plants are strong enough, thin or transplant them to stand 3 to 4 inches apart; then when they are about 3 inches high transfer them to small paper pots or dirt-bands. To secure extra-strong, stocky plants, transfer them again, when 6 to 8 inches tall, to larger pots. As the season advances, "harden" them by exposing them to the air on warm days, but protect them carefully from chill at all times. When all danger from frost is past—generally after the middle of May—set them out in the garden, spacing them about 4 feet apart each way. Water freely at the time of transplanting and push the young plants along with an occasional light application of nitrate of soda or liquid manure. In large field plantings it would hardly be practicable to stake each plant, but in the home-garden it is certainly well worth while, for not only do staked plants take up less room but they produce more and better fruit, and ripen earlier. Set stout stakes 5 to 6 feet high firmly in the ground close to the base of each plant, trim off all but two or three of the strongest shoots and tie these to the stake with strips of cloth, soft twine or raffia. As the plants grow, trim out side shoots and suckers, and when the vines reach the top of the stake, pinch off the tops. To guard against blight, spray the plants with Bordeaux Mixture or Sulfocide two or three times during the season; arsenate of lead will kill the Tomato worms. The average home-gardener will find it advisable to grow at least three varieties of Tomatoes to provide a succession of fruit during the season.



Break o' Day
Tomato

BREAK O'DAY. Earlier than Marglobe and fruits are freer from cracking around stem end than Marglobe. They are of good size, smooth and of good quality. Desirable type to plant for early market as the quality of fruit is exceptional compared to other early-maturing varieties. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

PRITCHARD. Very early, productive, and self-topping. Fruits scarlet within and without, firm and meaty, with no core and practically no seed-pockets. Outstanding for its remarkable productiveness, breaking all records. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

JOHN BAER. Undoubtedly one of the most valuable of all early varieties of Tomato. The fruits are of good size, perfectly smooth, and nearly globe-shaped, with brilliant scarlet skin and firm flesh, entirely free from core and with few seeds. The flavor is mild and deliciously sweet. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

BURBANK. (94 days.) An earliest, scarlet-fruited variety. Fruits are small to medium in size, quite smooth but inclined a little to angularity. Cell structure is very irregular. Fruits set in large clusters. Pkt. 15 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

EARLIANA, SPARK'S. This is the original Earliana Tomato, for years the standby for first-early market. The plants are compact, with light foliage; the fruits are of good size, bright red, and quite solid. Pkt. 10c., ½oz. 30c., oz. 50c., ¼lb. \$1.50, lb. \$5.

RUTGERS. A beautiful, new, early-ripening Tomato with disease-resistant plants. The sparkling red fruits are smooth, almost round, and very solid. Has been very successful on poor soil. ½oz. 35 cts., oz. 60 cts., ¼lb. \$1.75, lb. \$6.

JUNE PINK. The best extra-early pink or purplish colored Tomato, similar to Earliana in earliness and in most other respects except color. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

BONNY BEST. The most popular Tomato grown to follow Earliana or John Baer. It is remarkably productive even on light soils, producing large, round, smooth fruits in handsome clusters. Uniform in size and shape, solid, free from cracks, bright scarlet in color. A fine variety for the home-garden. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

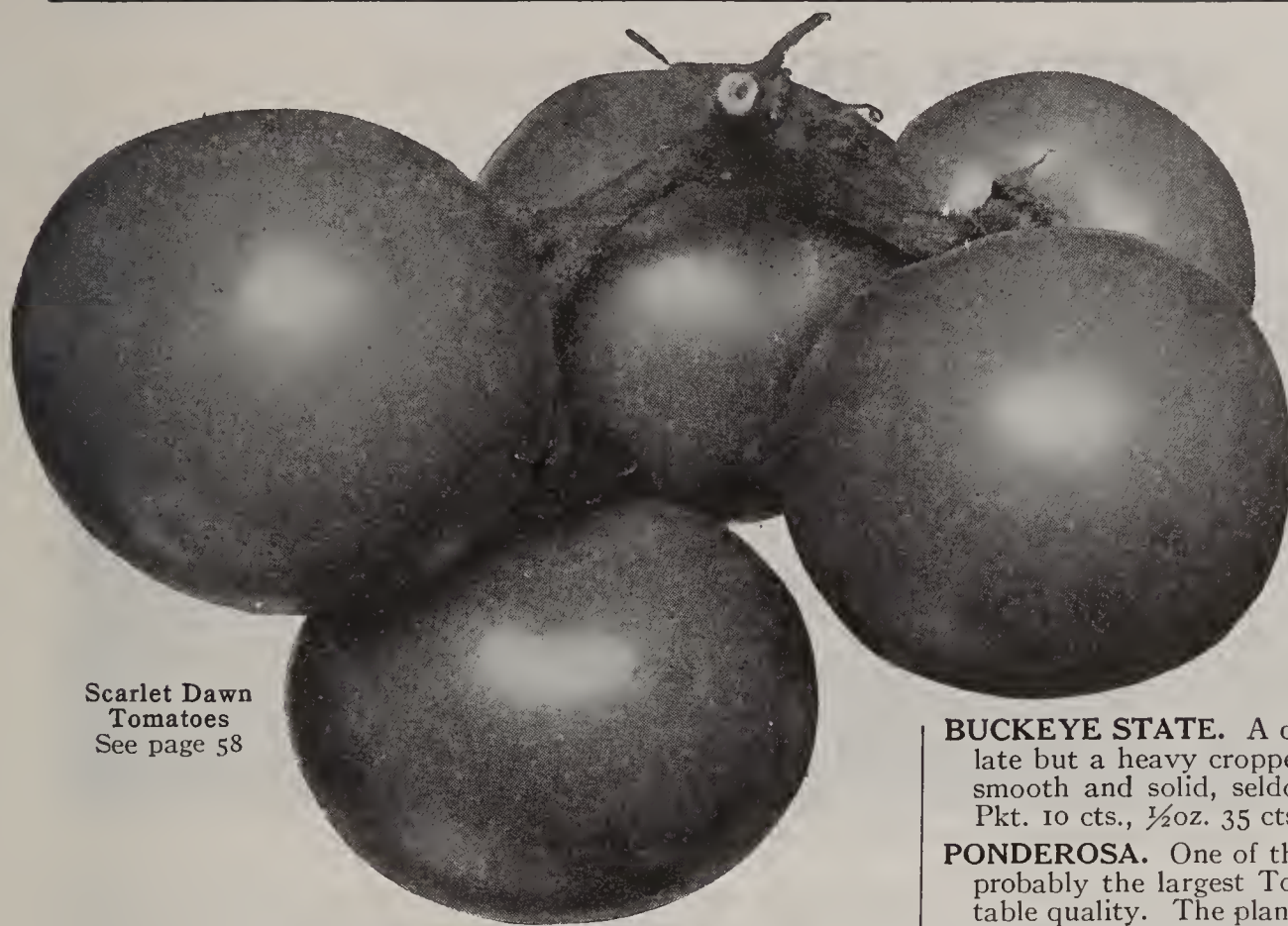
CHALK'S EARLY JEWEL. Ripening at about the same time as Bonny Best, this variety is an enormous producer, particularly on heavy soils. The fruits are a little larger than Bonny Best, slightly flattened in shape and bright scarlet in color, always solid, with hard, smooth skin. Excellent for market and shipping. Pkt. 10 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

EARLY DETROIT. A pink-fruited Tomato which may be compared with Chalk's Early Jewel among the scarlet sorts. Fruits nearly round, firm, and of fine quality. One of the best for shipping. Pkt. 10c., ½oz. 30c., oz. 50c., ¼lb. \$1.50, lb. \$5.

SCARLET DAWN. While not extra-early, it is a second- or medium-early sort, and ripens before either of its parents, Chalk's Early or Marglobe. Very firm, brilliantly colored, globe-shaped fruits. Wilt- and rust-resistant. A Gold Medal variety that ranked second in the All-America trials. Pkt. 15 cts., ½oz. 35 cts., oz. 60 cts., ¼lb. \$1.75, lb. \$6.



Marglobe Tomato



Scarlet Dawn
Tomatoes
See page 58

TOMATOES, continued

LIVINGSTON'S GLOBE. One of the most valuable Tomatoes, producing heavy crops of good-sized, uniform, distinctly globe-shaped fruits with smooth, glossy, purplish rose skin. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

MARGLOBE. The fruits are of medium size, smooth, solid, and deep from stem to blossom end, with an irregular cell structure. They are borne in clusters of five to seven. The vine makes medium to heavy growth. A good main-crop variety. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

MARHIO. This is a new variety with fruit of a very attractive dark rosy pink. A vigorous grower, heavy cropper, wilt resistant, free from cracks and excellent for fall forcing. Pkt. 15 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

TRUCKER'S FAVORITE. A dependable, late, main-crop, purple sort, bearing large, flattened fruits which are smooth and solid and of fine quality. The vines are unusually vigorous and not subject to blights. One of the most productive. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

BEEFSTEAK. Late; purplish pink; vines strong and vigorous; very little seed; large, solid fruit. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

MATCHLESS. A favorite, main-crop Tomato with bright red, solid fruits of excellent quality. The plants are strong-growing. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

OXHEART. (120 days.) A main-crop, pink-fruited variety. Fruits are large, bulging, heavy and solid, tapering almost to a point, with broken cell structure. They set in clusters of three to seven. Vine growth is open and spreading. Pkt. 15 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

YELLOW OXHEART. Like Oxheart in all respects except that the skin and flesh are a beautiful golden yellow. Pkt. 15 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1, $\frac{1}{4}$ lb. \$3, lb. \$10.

STONE. An unusually productive, smooth, bright red Tomato, probably grown more extensively than any other variety in cultivation. It is a favorite for canning and a most dependable sort for main crop in both market-and home-gardens. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

GREATER BALTIMORE. A selection from Stone with all the good qualities of that fine old standby, but comes into bearing a little earlier. It is particularly desirable for canning. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

DWARF STONE. Bushy, compact plants, bearing large, solid bright red fruits of the finest quality. Require little space and no support. Medium early. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

DWARF CHAMPION. Very dwarf and compact in growth. It comes into bearing quite early; the fruits are of medium size, round and smooth with purplish pink skin. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

PENN STATE. An extra-early Tomato with very compact plants literally loaded with great clusters of perfect fruits. The beautiful rich scarlet Tomatoes are nearly globe-shaped, with dark red flesh and very few seeds. Pkt. 15 cts., $\frac{1}{2}$ oz. 90 cts., oz. \$1.50, $\frac{1}{4}$ lb. \$5.

BUCKEYE STATE. A dark purple Tomato of very large size; late but a heavy cropper. Fruits nearly globe-shaped, always smooth and solid, seldom cracking even when fully ripened. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

PONDEROSA. One of the best varieties for home-gardens and probably the largest Tomato in cultivation, also the finest in table quality. The plants are vigorous, medium in season, and bear clusters of enormous fruits, which weigh as high as two pounds apiece. Somewhat irregular in shape but extremely solid and with very few seeds. Purplish pink. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

YELLOW PONDEROSA. The yellow-fruited varieties of Tomatoes are preferred for table use by many planters on account of their very mild and sweet flavor. Skin clear golden yellow; flesh pale yellow, solid and meaty. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

GOLDEN QUEEN. A productive sort, bearing good-sized, round, smooth fruits, bright yellow in color, solid and of splendid quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

YELLOW PLUM. The fruits resemble a plum in size and shape but are bright yellow in color. Enormously prolific; in great demand for preserving. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$2, lb. \$7.



Stone Tomato

FIELD SEEDS



Mowing Timothy and Clover with the Silver King Tractor

The Grains and Grass Seeds we offer are selected with special reference to their purity and germination, and great care is used to have them free from noxious foreign seeds. Every lot of seed is tested by a competent seed-analyst for purity and germination before it is offered for sale. A tag is attached to every bag showing the results of the test, also the origin of the seed. With this information, every farmer knows exactly what he is getting.

We handle the very best seeds the market affords. Quality is our first consideration. With over 50 years' experience, you can depend on us for your seeds.

Prices. Owing to the frequent changes in the prices of Field Seeds and Grains, we cannot, in fairness to our customers or ourselves, name prices in our Catalogue. Catalogue prices are largely guess-work, and we prefer to have our customers ask us for prices when they are ready to buy, specifying the quantities of the different seeds wanted. With the prices we will send samples, with purity and germination tests.

Descriptions of Grass Seeds are found on page 3.

CLOVERS

MEDIUM RED. More widely known than any other variety of Clover. Makes a standard Clover for hay purposes, as it can be cut at least twice in the season. Plants grow about 2 feet in height. Sow the seed in the early spring or late summer at the rate of fifteen to twenty pounds to an acre. If used with other seeds, ten pounds to an acre will be sufficient.

MAMMOTH RED. Sometimes called Sapling or English Clover. It is much ranker than the Medium Clover, and yields a much larger crop per acre. It does well on poor soil, is hardy, and usually will stay in the ground longer than Medium Clover.

ALSIKE. One of the best for sowing with Timothy. The seed may be sown in spring, late summer or early autumn, and as the plants are perfectly hardy, the field seldom requires reseeding. The flowers resemble White Clover, but have a red tinge on the edge of the petals and are considerably larger. Thrives better on thin soils than Red Clover. Sow the seed in the early spring or late summer at the rate of eight to ten pounds to an acre.

SWEET. This is a legume whose value today as a soil-improver is much appreciated. It is also used for forage. It is recommended by authorities and farmers everywhere. Will do well in most any soil, but it requires lime and the seed should be inoculated. It may be sown either in the spring or fall. Sow about twenty pounds of seed to an acre. Although a great number of different species are grown in the Old World, we recommend for this climate only the White Blossom Biennial (*Melilotus alba*).

CRIMSON. This Clover is used principally for turning under as a green fertilizer, or for sowing with corn for a winter cover-crop. If desired for feed, the plants should be cut just before they come into bloom. Seed may be sown any time after the first of April at the rate of twenty pounds to the acre. Plants

Clover, continued

are strictly annual, therefore the field must be reseeded every year. Thrives on poor land and increases fertility of the soil.

WHITE. White Clover is specially valuable for lawn planting and is likewise good for pasturage. Seed can be sown any time in early spring or summer. It is perfectly hardy and very thrifty. Use from ten to twelve pounds to the acre if sown alone; about five pounds to the acre if sown on old sod or with other Clover.

ALFALFA

One of the most nutritious plants grown; valuable as a dried hay or for pasture. With proper cultivation it can be grown on some part of almost any farm in Pennsylvania or adjoining states. Two or three cuttings can be made in a season, producing from 3 to 5 tons of hay per acre. Ton for ton its feed-value equals that of wheat-bran. From 12 to 15 pounds of seed are usually sown to the acre; some growers sow only 10 pounds to the acre. We sell the very best northwestern American-grown seed.

GRIMM ALFALFA. This variety is well known and is sown because of its hardiness, productiveness, and greater resistance to all types of "yellowing." The extra cost per acre for seed of this variety is generally justified. We sell genuine certified Grimm.

Inoculate all Clover and Alfalfa seed with Farmogerm.
See page 71

TIMOTHY

A description of this old familiar hay-making grass is unnecessary here. It is recognized by almost everyone wherever found, and is probably the most extensively grown of all the grasses. It may be sown alone or with Red or Alsike Clover, or with other grasses. From twelve to fifteen pounds of seed are usually sown to the acre.

PERMANENT PASTURE MIXTURE. See page 3.

MISCELLANEOUS FARM SEEDS

Treat seeds of legume crops with Farmogerm and seed-grains with New Improved Ceresan. See page 71

SOY BEANS. A valuable plant for bringing nitrogen into the soil. It is also excellent for green or dried fodder, and the seed is very rich in protein, making an excellent dairy feed when balanced with other grains. Seed should be sown during the months of May or June, using at least one bushel to the acre, when sown broadcast, or when sown in drills, 2½ feet apart, about three pecks to the acre. We handle two varieties—**Wilson** and **Manchu**. The Wilson is a well-known variety in Pennsylvania for an early hay crop. It has fine stems, produces abundant foliage, and is also suitable for silage. The Manchu is a good all-purpose variety. Valuable for forage or hogging down.

COWPEAS. One of the best soil-enrichers, taking the nitrogen from the air and storing it in the soil; valuable also for hay, forage, ensilage or turning under. They should be sown in this latitude in May or June, using, when sown broadcast, one and one-half to two bushels to the acre. Many different varieties are grown in the United States, but the most suitable for sowing in the North are the **Whippoorwill** and **New Era**.

CANADA FIELD PEAS. Used for hay and pasture as well as soil-improvement. Canada Field Peas should be sown as early as possible in the spring, either alone or with oats. When sown broadcast alone, at least two bushels of seed to the acre should be used, or with oats, one and one-half bushels of Peas and one bushel of oats.

DWARF ESSEX RAPE. Especially valuable for feeding sheep, hogs and cattle. Claimed to have a feed value greater than clover. Always used as a pasture and not for hay. Its growth is similar to turnip-tops, but heavier and taller. If seed is sown in May the field should be ready for pasture in July. However, seed may be sown either in early spring, summer or fall. If sown in drills, about five pounds of seed will be required for an acre; if sown broadcast, ten pounds to the acre.

BUCKWHEAT. **Japanese** and **Silver Hull** are the two leading varieties. The Silver Hull produces whiter flour, but the Japanese is more productive. The Silver Hull grows particularly well on poor soil and matures a little later than the Japanese. Seed required, one to one and one-half bushels to the acre.

MILLET. A medium-early forage plant which will grow in almost any climate or soil and produces heavy yields of fodder. The crop should be cut while the plants are in bloom, or at least before the seed forms. Seed may be sown during the month of May or the early part of June at the rate of from thirty to forty pounds to the acre. The Golden variety is considered the better for hay.

WINTER or HAIRY VETCH. One of the best legumes, whether used for a hay crop, pasture, soil-improvement or cover-crop. Thrives on light soils and is very hardy, remaining green throughout the winter. May be sown in the spring or fall, using from sixty to seventy pounds of seed to the acre when sown alone. It is better, however, to furnish a support for the Vetch by sowing rye, barley or oats with it at the rate of one-half bushel of grain and fifty pounds of Vetch to the acre.

SORGHUM or AMBER CANE. Used principally as a summer fodder for cattle. Plants will grow rapidly and at least two crops can be cut each season. If carefully cured it will make an excellent dry fodder. The seed may be sown in drills about 30 inches apart, at the rate of five to six pounds of seed for an acre. If sown broadcast, from seventy-five to one hundred pounds of seed are generally used.

LESPEDEZA (Japan Clover). This is a pasture or hay plant that is very popular in the southern states, where it will give good results, even on the poorest soils. It is quite extensively used for lawn purposes in sections suited to it.

BARLEY. We have the **Oderbrucker** variety. It is a stiff-strawed, six-rowed, bearded Barley, the heaviest yielder that has been introduced, both in grain and straw. Two bushels of seed will be required for an acre.

SUDAN GRASS. Grows very rapidly and is recommended as a substitute for millet for a catch-crop. Attains a height of from 5 to 9 feet and has great drought-resisting qualities. It is strictly an annual and dies each year, like millet. If sown in rows, four to six pounds of seed per acre is recommended or broadcast sixteen to twenty-four pounds per acre.

WINTER WHEAT. We can supply the leading sorts of Winter Wheat. Our stock usually consists of **Leaps Prolific**, **Pennsylvania 44**, **Forward**, and **Klondyke**. Write us for samples and prices before seeding time.

SPRING WHEAT. If your winter wheat happens to be killed by extreme cold weather, you can still secure a crop by sowing Spring Wheat in early spring. **Marquis** is the leading variety sown in Pennsylvania.

WINTER RYE. Usually sown as a cover-crop, getting the seed into the ground before the middle of November. About one and one-half bushels of seed will be required for an acre.

SPRING RYE. Matures early and makes an excellent green food when cut, or will supply pasturage for several weeks. Distinct from the winter sorts, as these seeds are smaller.

OATS

VICTORY. A branching or tree Oats, having a white grain, with fairly thin hull. The straw is medium fine, very strong, and stands a great deal of bad weather before lodging. It ripens early and is an enormous yielder.

PATTERSON. An old and well-established variety originated by Pennsylvania State College. Medium early, with rather small, light yellow grains. The straw is fairly long but only medium stiff. A heavy yielder.

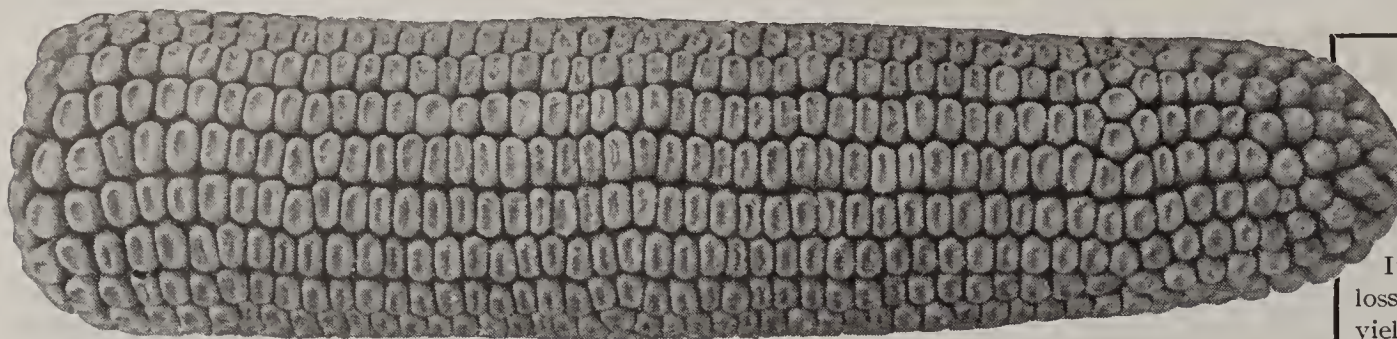
CORNELLIAN. A branching or tree-shaped variety. The kernels are long, rather slender, with very thin hulls. The grains do not make a very attractive appearance, but on account of the thin hulls it has excellent feeding quality. A remarkably heavy-yielding variety of high quality Oats for feeding.

STORM KING. A side Oats that has been grown successfully for some years. It derives its name, Storm King, from the strength of the straw, which often measures from 4½ to 5½ feet in height. It will stand the most severe winds without lodging. Heads long, containing an unusually large number of grains; yields from 70 to 100 bushels to the acre.

SWEDISH SELECT. This variety is too well known to require a lengthy description here. The quality of the grain is unsurpassed. Very thick kernel and thin shuck. Does not have a long beard like common Oats. The straw grows to a medium height, is very stiff, and consequently seldom lodges. It has proved to be a wonderful yielder.



Swedish Select Oats



Improved Leaming Corn

Protect Your
Seed Corn With
Stanley's Crow
Repellent

It is economical to use, saves
loss of seed, and insures larger
yield per acre. See page 72.

FIELD CORN

We have always made a specialty of Seed Corn, supplying our trade with only those varieties that experience has proved are most suitable for the climate of Pennsylvania, Ohio, and West Virginia. Our Seed Corn is carefully hand-picked and tipped and butted before it is shelled. We aim to have every variety true to name and of high germination.

GOLDEN SURPRISE. An old-time variety maturing in 90 to 95 days. Because of quality, yield, and color, Golden Surprise is one of our most popular Corns. Ears are good size, with 14 to 18 rows of long, light orange kernels. A crackerjack good Corn for the crib, and has a host of friends.

SURE-CROP. The tremendous quantity of shelled Corn this variety produces to the acre surprises everyone who grows it. Generally there are two good ears to a stalk. The grain is very long—and the cob very thin. Has a rich, deep yellow grain, making it much desired by millers. The fodder grows from 8 to 10 feet high. Ripens in 90 to 100 days.

EARLY ORANGE YELLOW DENT. A 90-day Corn that is almost a giant, stalks ranging from 8 to 11 feet high. The ears are 8 to 10 inches long, with 16 rows on a red cob. One of the earliest maturing and prettiest yellow Dents in cultivation, which has made a reputation for yield and quality.

PRIDE OF THE NORTH. A Yellow Dent variety, maturing in 90 days. Ears 8 to 10 inches long, sixteen rows on the ear, cob small, grain above medium size and closely set. One of the hardiest, and especially adapted to the northern planter; will mature farther north than any other Dent Corn.

IMPROVED LEAMING. Matures in 90 to 100 days. Produces a good-sized ear, with deep, broad grains. A large, vigorous, and quick-growing sprout makes leafy fodder; one of the best varieties for silage. Improved Leaming has yielded as high as 75 bushels of shelled Corn per acre.

WHITE-CAP YELLOW DENT. An early sort which grows well on light soil; grain is yellow with white tip. Nearly as early as Pride of the North, maturing in from 90 to 95 days. Ears from 8 to 10 inches long, well filled, with sixteen or eighteen rows.

ENSILAGE CORN

WEST BRANCH SWEEPSTAKES. A very hardy variety, thriving in northern Pennsylvania where it is difficult to mature the ordinary ensilage Corn. Has yielded over 15 tons of green weight per acre. Stalks 10 to 12 feet high; ears 12 inches in length, with 14 to 20 rows. It has produced more than 150 bushels of ears per acre. Should be heavily fertilized to mature a desirable crop. Large quantities are grown in dairy sections for ensilage purposes. Matures for silage in 90 to 100 days.

LANCASTER COUNTY SURE-CROP. Lancaster County Sure-Crop holds first place in the estimation of many leading farmers. It is a yellow Corn; ears are very long and not proportionately thick. It grows quite tall, is very leafy and develops ears early. Some farmers claim that for husking purposes it is just as valuable a variety as it is for ensilage.

YELLOW SWEEPSTAKES. Large, broad, deep golden yellow grains; large ears at least 12 inches long. Very heavy yielder, producing 19 tons per acre in New York State tests and 24 tons in Rhode Island tests, and has averaged 64 bushels of Corn per acre. About 10 days earlier than white ensilage varieties.

EUREKA. (Virginia-grown.) Virginia-bred Corn originated on the rich bottom of the James River Valley where it grows to perfection, often 16 to 18 feet high. It is a vigorous grower, with large stalks, unusually heavy foliage, and produces from one to three ears to the stalk, according to the land. The ears average about 11 inches in length.

BLUE MOUNTAIN. This Corn is grown at a high altitude in the Blue Ridge Mountains in Virginia, and makes an ideal ensilage Corn. Grows to a mammoth size, full of leaves, and has a big ear. It is a vigorous-growing Corn, often knee-high after 30 days from planting, and grows 14 to 16 feet high. Our seed is selected in the fall, properly taken care of, and always shows a nearly perfect germination test.

VIRGINIA HORSE-TOOTH. The popular fodder Corn of the Southern States; from 12 to 14 feet high, and stiff enough to stand up during severe storms. The seed is white, broad, and deep, with white cob.

RED-COB. A tall-growing plant, with a quantity of side leaves, making it desirable for ensilage. A favorite with a great many growers. The grain is narrow and clear white.

Write us for special prices and samples of Field Seeds and Grains. Specify quantities wanted.



West Branch Sweepstakes Corn

SEED POTATOES

NORTHERN-GROWN CERTIFIED SEED

For many years we have made a specialty of supplying our trade with northern-grown Seed Potatoes. Our stock is especially grown for seed, by experienced growers in the cold North and Northwest, and is Certified Stock, U. S. Standard No. 1, high quality, true to type and free from disease. Seed Potatoes that are northern-grown, moved south only from 100 to 300 miles, frequently produce double the crop of home-grown seed.

We begin shipping Seed Potatoes as early in the spring as weather conditions will permit, usually the latter part of March. However, we urge our customers to place their orders early, while our stock of all varieties is complete. Owing to the perishable nature of Seed Potatoes the market is subject to radical changes, and it is impossible for us to quote prices at the time our Catalogue goes to press. Price-list sent on request.

There is no crop so much benefited by the introduction of fresh, new seed as the Potato. ORDER EARLY WHILE OUR STOCKS ARE COMPLETE



Russet Potatoes

EARLY VARIETIES

EARLY SIX WEEKS. (Certified.) A very early Potato, somewhat resembling the Early Ohio.

SPAULDING'S EARLY ROSE. (Certified.) A seedling of the Early Rose, with pink skin, pure white flesh, much stronger foliage and a better Potato than the Early Rose in every way.

EARLY OHIO. (Certified.) A sort that is well known by market-gardeners who are after a first-early Potato for home trade; the tubers are almost round, with pink skin and of excellent quality.

IRISH COBBLER. (Certified.) An extra-early, round, white Potato. Vines yie'd heavily and the tubers are of extremely fine quality. An excellent all-round variety, either for the home-garden or growing commercially. About a week to ten days later than Early Ohio, but usually much more productive.

Price-list of Seed Potatoes furnished upon request

Treat Seed Potatoes with Du Bay Semesan Bel
See page 71



Irish Cobbler Potatoes

LATE VARIETIES

HIRUCO No. 9. (Certified.) This variety has always excelled in its eating quality, heavy-yielding ability, shallow and well-placed eyes, the latter making it cut to much better advantage for seed than do many of the other well-known varieties. Its smooth white skin makes it have a beautiful appearance and therefore satisfies a wider range of markets than a rougher skinned tuber.

RUSSET. (Certified.) It is an exceptionally heavy yielder, table quality of the very best, and with smooth, velvety, russet skin and shallow eyes. No Potato can surpass it in uniform and handsome appearance. It is very fine-grained, cooks as white as flour, and is of splendid flavor; an excellent keeper and retains its good eating qualities until late in the spring. It is one of the hardiest varieties known. Its great productiveness, handsome color and resistance to diseases make it a very popular Potato and one especially suited to our locality.

CARMAN No. 3. (Certified.) Extra large, oblong, slightly flat, white. Vines are extra-good growers and yield an immense quantity of tubers of uniform size. One of the best late varieties; of excellent quality; good keeper.

SIR WALTER RALEIGH. (Certified.) The tubers vary from round to oblong in shape, uniformly of good size, white-skinned and of excellent quality. A good keeper, and, like Carman No. 3, a very heavy yielder.

RURAL NEW YORKER No. 2. (Certified.) The tubers are round to oblong, unusually large, white, eyes near the surface, and sets as a rule only two to four tubers per plant or hill, but usually all large ones.

IMPROVED GREEN MOUNTAIN. (Certified.) In the Improved Green Mountain we have a better Potato than was the old Green Mountain at its best. The tubers are uniform in shape, oblong, with two good ends, slightly flattened, creamy white skin, and pure white flesh of excellent quality.

Price-list of Seed Potatoes furnished upon request

Fertilizer. We recommend Agrico or "AA" Gladiator Fertilizer as excellent for Potatoes. See pages 64 and 65 for prices.

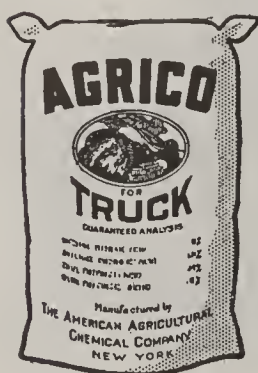
Potato Machinery. If you are interested in Potato Machinery, write for special catalogue giving detailed descriptions of Potato Planters, Diggers, and Sprayers.

AGRICO

The Fertilizer with the Extra Plant-Foods A Brand Specially Formulated for Each Crop

Agrico, the premier "AA Quality" Fertilizer, represents the best combination of plant-foods for each crop that experience and science have produced. There is a grade of Agrico specially formulated for each crop and each principal crop-growing section—with just the right amounts and sources of Nitrogen, Phosphorus and Potash—plus extra plant-foods, so-called rare elements, needed to produce bigger yields and better-quality crops.

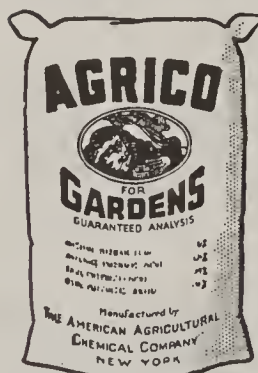
These Agrico goods have been on the market for 14 years, in which time they have earned their present position as the nation's leading fertilizer—earned it in one way, and only one way—that is, by superior crop-producing power, as demonstrated by comparative crop-tests on thousands of farms. It is indeed fair to say that "You'll never know how much your land really can produce until you use Agrico." Try Agrico this year and see for yourself.



Agrico for Truck (5-10-5)

Quality is the all-important thing in growing truck—there is always a profitable market for top-grade produce. That is where the extra margin of crop-producing power in Agrico for Truck (5-10-5) plays such an important part. Bigger yields—yes; and better quality, too, with Agrico.

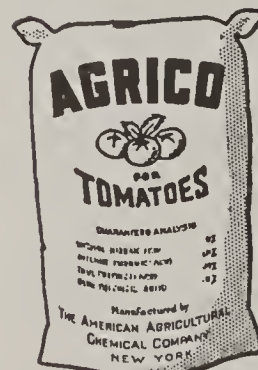
100 lbs. \$2 50	1,000 lbs. . . . \$20 60
500 lbs. 11 00	2,000 lbs. . . . 38 20



Agrico for Gardens (5-10-5)

A well-balanced plant-food formula for the kitchen garden, for flowers and shrubs, or for lawns; with the extra plant-foods that impart greater vitality and encourage healthier, more vigorous growth.

10-lb. bag. . . \$0 60	50-lb. bag. . . \$1 90
25-lb. bag. . . 1 10	100-lb. bag. . . 3 00



Agrico for Tomatoes (4-14-6)

Is specially formulated to do one job, and do it better—that is, to grow top-quality tomatoes. Result, growers frequently sell their Agrico-grown tomatoes at premium prices. For bigger yields and better-quality tomatoes, use Agrico.

100 lbs. \$2 60	1,000 lbs. . . . \$21 40
500 lbs. 11 50	2,000 lbs. . . . 39 75



Agrico for Fruit (9-6-6)

Provides an adequate supply of all the plant-foods needed at each stage of growth, imparts healthy tone and vigor that helps ward off disease, and helps produce the best there is in each particular fruit variety.

100 lbs. \$2 90	1,000 lbs. . . . \$24 30
500 lbs. 12 90	2,000 lbs. . . . 45 60



Agrico for Corn (3-12-6)

Vigorous root-growth, sturdier stalks, ears filled out to the tip, larger yields and better quality—these results are invariably reported by farmers who use Agrico for Corn (3-12-6). Those extra plant-foods help!

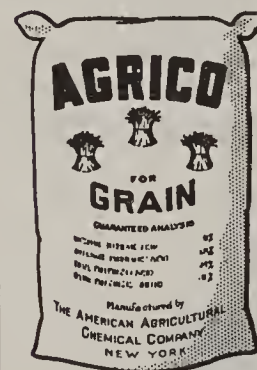
100 lbs. \$2 40	1,000 lbs. . . . \$19 60
500 lbs. 10 55	2,000 lbs. . . . 36 20



Agrico for Potatoes (4-8-7)

Up in Aroostook County, Maine, the nation's leading seed-potato growers, almost without exception, use Agrico. The same thing goes for the potato specialists in other parts of the country. That is because Agrico for Potatoes (4-8-7) produces more No. 1's—fewer seconds and mighty few culls. Our stocks of this brand specially formulated for this section.

100 lbs. \$2 40	1,000 lbs. . . . \$19 45
500 lbs. 10 50	2,000 lbs. . . . 35 90



Agrico for Grain (2-12-4)

Specially formulated to grow larger yields of better-quality grain, and, as with all other grades of Agrico, extra plant-foods are added in pre-determined quantities to meet the specific needs of the crop.

100 lbs. \$2 25	1,000 lbs. . . . \$17 95
500 lbs. 9 75	2,000 lbs. . . . 32 65



Agrico for Pastures (7-6-6)

Reduce your purchased feed-bill and increase your profits by applying Agrico for Pastures and Top-Dressing (7-6-6). Pasture more cattle on a given acreage; pastures ready to graze earlier in the spring; well-nourished, healthy cattle. Try Agrico on at least part of your acreage—it'll pay you well.

100 lbs. \$2 75	1,000 lbs. . . . \$22 25
500 lbs. 11 90	2,000 lbs. . . . 41 50

AGRICO for WHEAT (2-12-6)

Gives the crop a quick start, helping to insure against winter-kill; starts the wheat growing fast in spring; wheat plants stool better; Agrico stays with the crop to maturity, assuring plump, well-filled kernels to the tip of the stalk. This means better-quality grain, which weighs more per bushel and often brings a premium. 100 lbs. \$2.30; 500 lbs. \$10; 1,000 lbs. \$18.60; 2,000 lbs. \$34.20.

"AA" QUALITY FERTILIZERS

A record of performance extending back over nearly three-quarters of a century fairly entitles "AA Quality" Fertilizers to be called the nation's standard crop-producers. Good crops depend on good fertilizer. It pays to use "AA Quality."

"AA" RED SEAL (5-10-5)

In 100-lb. bags

100 lbs. \$2 45	1,000 lbs. ... \$19 60
500 lbs. 10 55	2,000 lbs. ... 36 20

"AA" GLADIATOR (4-8-7)

In 100-lb. bags

100 lbs. \$2 30	1,000 lbs. ... \$18 50
500 lbs. 10 00	2,000 lbs. ... 33 95

"AA" CLIMAX (3-12-6)

In 100-lb. bags

100 lbs. \$2 30	1,000 lbs. ... \$18 60
500 lbs. 10 00	2,000 lbs. ... 34 20

"AA" CHAMPION (2-9-5)

In 100-lb. bags

100 lbs. \$2 10	1,000 lbs. ... \$16 20
500 lbs. 8 85	2,000 lbs. ... 29 40

16 Per Cent Superphosphate

In 100-lb. bags

100 lbs. \$1 70	1,000 lbs. ... \$12 50
500 lbs. 7 00	2,000 lbs. ... 21 95

20 Per Cent Superphosphate

10 lbs. \$0 50	50 lbs. \$1 50
25 lbs. 1 00	

In 100-lb. bags

100 lbs. \$1 90	1,000 lbs. ... \$14 05
500 lbs. 7 80	2,000 lbs. ... 25 10

Nitrate of Soda

Fifteen per cent nitrogen, equivalent to over 18 per cent ammonia. 1 lb. 15 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs. \$3 10	1,000 lbs. ... \$26 50
500 lbs. 14 00	2,000 lbs. ... 50 00

Sulphate of Ammonia

20.5 Nitrogen. 2 lbs. 25 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs. \$3 10	1,000 lbs. ... \$26 20
500 lbs. 13 85	2,000 lbs. ... 49 35

Granular "Aero" Cyanamid

Granular Aero Cyanamid is a fertilizer carrying both *nitrogen* and *lime*. A 100-pound bag supplies 21 pounds of nitrogen and 70 pounds of hydrated lime.

May be applied early in the crop-season without danger of loss of its fertilizing value. Its nitrogen is yielded up to the plant as required. The lime of Aero Cyanamid is in a very active form.

100 lbs. \$3 25	1,000 lbs. ... \$26 95
500 lbs. 14 25	2,000 lbs. ... 50 85

Muriate of Potash

Imported, guaranteed 48 per cent K₂O. 1 lb. 15 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs. \$3 00	1,000 lbs. ... \$25 15
500 lbs. 13 30	2,000 lbs. ... 47 25

Sulphate of Potash

Forty-eight per cent potash. Generally used for acid-loving plants. Lb. 20 cts., 5 lbs. 50 cts., 10 lbs. 90 cts., 25 lbs. \$1.40, 50 lbs. \$2.25, 100 lbs. \$4.

Lawn and Garden Bone-Meal

Especially adapted for lawns, gardens, and greenhouses. Ground very fine.

Nitrogen, 2.47 per cent; total Phosphoric Acid, 22.88 per cent.

5 lbs. \$0 30	25 lbs. \$1 10
10 lbs. 50	50 lbs. 2 00

In 100-lb. bags

100 lbs. \$3 10	1,000 lbs. ... \$26 45
500 lbs. 14 00	2,000 lbs. ... 49 90

Pure Raw Bone-Meal

Used for the same purpose as Lawn and Garden Bone-Meal, but not so quick in action.

Nitrogen, 3.70 per cent; total Phosphoric Acid, 21.50 per cent.

In 100-lb. bags

100 lbs. \$3 25	1,000 lbs. ... \$28 00
500 lbs. 14 75	2,000 lbs. ... 53 00

Dried Blood

Generally used in greenhouses, rose and flower gardens, etc. A safe form of organic nitrogen.

5 lbs. \$0 50	50 lbs. \$3 25
10 lbs. 90	100 lbs. 6 00
25 lbs. 1 75	500 lbs. 28 75

Cottonseed Meal

High in nitrogen and potash. Mostly used on lawns and golf greens.

25 lbs. \$1 25	100 lbs. \$3 50
50 lbs. 2 00	

Larger quantities quoted on request.

Scotch Soot

Recommended both as a fertilizer and fungicide. Will produce color in flowering plants; also effective against grubs and worms that work near the surface.

5 lbs. \$0 75	50 lbs. \$4 00
10 lbs. 1 25	100 lbs. 7 50
25 lbs. 2 25	

Horn Shavings

High in ammonia. Used principally in potting soil.

10 lbs. \$1 00	50 lbs. \$4 00
25 lbs. 2 25	100 lbs. 7 00

Aluminum Sulphate

Experiments have shown that soil acidity is required for rhododendrons, azaleas and all other evergreens. Apply at the rate of about one-half pound per square yard.

1 lb. \$0 15	25 lbs. \$1 50
5 lbs. 50	100 lbs. 4 50
10 lbs. 75	

Eisler's Humus

An organic material used principally as a soil-conditioner and for mixing with potting soil. Recommended for lawns, flower-beds and gardens.

Small bag (about 10 lbs.)	\$0 45
Large bag (about 100 lbs.)	1 75
5 bags	6 50
10 bags	11 00

Larger quantities quoted on request.

Unleached Hardwood Ashes

Indispensable for all crops requiring potash.

5 lbs. \$0 25	500 lbs. \$12 50
25 lbs. 90	1,000 lbs. ... 23 50
100 lbs. 3 00	2,000 lbs. ... 44 00

Agricultural Gypsum

Agricultural Gypsum (land plaster) is an untreated, ground, natural rock fertilizer, consisting mainly of hydrated calcium sulphate. It therefore bears two essential plant-foods, calcium and sulphur. It is also used as a carrier of insecticides, such as paris green, calcium arsenate, etc.

Put up in 100-lb. paper bags

100 lbs. \$1 40	1,000 lbs. ... \$10 00
500 lbs. 5 75	2,000 lbs. ... 17 00

Ask for booklet, "How and Why of Gypsum"

Bald Eagle Hydrated Lime

Available Calcium Oxide, 69.50
Available Magnesium Oxide, .85

Prepared especially for vegetable gardens, lawns, greenhouses, whitewash, and kindred uses, besides all the various other purposes for which Lime is essential. It corrects the sour condition which exists in many soils, especially those shaded by houses or trees. About 1 pound of Bald Eagle to each 30 square feet of garden ground or lawn is sufficient to sweeten the soil.

10-lb. bag... \$0 25	500 lbs. \$5 75
50-lb. bag... 65	1,000 lbs. 10 00
100 lbs. 1 15	2,000 lbs. 17 00

Ask for delivered prices in carload lots

American Agricultural Limestone

Calcium Carbonate, 96.50
Magnesium Carbonate, 1.20

100 per cent passing 20 mesh; 70 per cent passing 100 mesh

Pure ground Limestone, artificially dried and very finely pulverized.

80-lb. bag... \$0 95	960 lbs. ... \$6 75
480 lbs. 4 10	2,000 lbs. 11 00

DELIVERY. Prices of fertilizer include local delivery in quantities of 50 pounds or more. On call orders and rail shipments an allowance will be made of \$1 from the 500-pound price, \$1.50 from the 1,000-pound price, and \$2 from the 2,000-pound price. Rail shipments F. O. B. cars, Pittsburgh. Quantities less than 50 pounds sent by Parcel Post at rates given on page 1 under "Parcel Post Shipments."

CASH DISCOUNT. A discount of 5 per cent will be allowed on orders of 500 pounds and upward on all Fertilizers listed on this page, when cash is remitted with order, or when paid for at time of delivery.

Nitrophoska (15-30-15)

A concentrated complete fertilizer—containing all of the three essential plant-foods: 15% nitrogen, 30% phosphoric acid and 15% potash. Excellent for lawns and gardens. Early spring application produces strong, vigorous growth of rich green color. A 10-pound package is enough for 1,000 square feet.

1-lb. pkg. . . \$0 25	25-lb. pkg. . . \$2 90
5-lb. pkg. . . 95	100-lb. bag. . . 6 50
10-lb. pkg. . . 1 60	

Floranid (Urea)

A very rich nitrogen fertilizer (46% nitrogen) used principally during the growing season to obtain more rapid growth, richer color of foliage, and greater brilliancy of bloom. A 5-pound package is enough for five monthly applications to 1,000 square feet.

1-lb. pkg. . . \$0 25	25-lb. pkg. . . \$2 90
5-lb. pkg. . . 95	100-lb. bag. . . 9 50
10-lb. pkg. . . 1 60	

Ammo-Phos

A high-analysis fertilizer material carrying both nitrogen and phosphoric acid; is very effective as a fertilizer, particularly for lawns, gardens, and golf-courses. Contains 16 per cent nitrogen and 20 per cent phosphoric acid. In 100-lb. bags.

100 lbs. . . . \$3 75	1,000 lbs. . . \$32 90
500 lbs. . . . 17 20	2,000 lbs. . . 62 80

Milorganite

A specially prepared fertilizer, high in nitrogen, and so constituted as to retain its nitrogen over long periods. This assures a uniform and constant supply of this vital plant-food element throughout the season, which is so essential for fine sturdy grass.

In 100-lb. bags	
100 lbs. . . . \$3 00	1,000 lbs. . . \$22 50
500 lbs. . . . 12 00	2,000 lbs. . . 42 00

Clay's Fertilizer

A well-known English fertilizer used principally on plants grown for exhibition.

7-lb. bag. . . \$1 50	56-lb. bag. . . \$7 00
14-lb. bag. . . 2 25	112-lb. bag. . . 12 00
28-lb. bag. . . 4 00	

The Sudbury Home Gardener's Soil-Test Kit

Simple, practical, easy-to-use. Tests for nitrogen, phosphorus, potash, and acidity, giving complete information for the intelligent adjustment of your soil to the requirements of your plants and grasses. Kit, complete with instructions and table of plant-needs, \$1.50.

Sudbury Horticultural Soil-Test Kit. Contains enough material for 60 individual tests. Complete, \$9.75.

Sudbury Professional Soil-Test Kit. Contains enough material for 200 individual tests. Complete in metal box, \$18.50.

Testing Fluid for Refill (Specify whether for nitrogen, phosphorus, potash, or acidity). 2 ozs. 75 cts., 6 ozs. \$1.50.

Vigoro

**Specially Prepared Plant-Food
For Lawns, Gardens, Flowers, Shrubbery,
Trees**

Vigoro is specially prepared to supply lawns, gardens, flowers, shrubbery, and trees with all of the plant-food elements needed for rapid, sturdy, and luxuriant growth.

Vigoro is clean, odorless, and easy to apply. It can be sown by hand, like grass seed.

Start right this year by using hardy, disease-free seeds and Vigoro. Your success in gardening will be assured. Complete directions in every bag.

1-lb. pkg. . . \$0 10	50-lb. bag. . . \$2 50
5-lb. pkg. . . 45	100-lb. bag. . . 4 00
10-lb. pkg. . . 85	500 lbs. . . . 16 00
25-lb. bag. . . 1 50	

Soil-Prep

Soil-Prep is rich in humus, and approximately ten times as effective as the average barnyard manures. It is entirely free from weed seeds and unpleasant odor and contains no filler. Apply at the rate of from 2 to 6 pounds per 100 square feet, depending on the condition of soil.

5-lb. bag. . . \$0 30	50-lb. bag. . . \$2 00
10-lb. bag. . . 50	100-lb. bag. . . 3 50
25-lb. bag. . . 1 15	500 lbs. . . . 16 00

Plantabbs

To keep house-plants looking lovely feed them Plantabbs, the balanced, complete food in clean, odorless, concentrated, convenient TABLETS.

Prices, postpaid: 30 tablets 25 cts., 75 tablets 50 cts., 200 tablets \$1, 1,000 tablets \$3.50.

Stim-U-Plant

A clean, odorless, and complete plant-food for potted plants, window-boxes, etc. It is applied to plants when, where, and as needed.

Prices, postpaid: 10 tablets 15 cts., 30 tablets 25 cts., 100 tablets 75 cts., 500 tablets \$2.50, 1,000 tablets \$3.50.

Driconure

The kind of Fertilizer that will *keep* your garden healthy and beautiful throughout the year—a peat-moss cow-manure bedding, dehydrated and free of weed seeds; purely organic, it contains all the vitalizing elements of fresh cow manure and peat moss in readily available form.

Use it on your plants and lawn. Packed in 3½-bus. (50-lb.) bags. 50 lbs. \$2.65, 250 lbs. \$12, 500 lbs. \$23, 1,000 lbs. \$44, 2,000 lbs. \$84.

Sorbex Moss Peat

Made from a selected high-quality Moss Peat, ground 25 times finer than ordinary peat moss. Ideal for top-dressing and potting-soil mixtures; corrects hard baked condition of turf. Bag containing 10 bus. material when loosened, \$3, 5 bags \$14.50, 10 bags \$27.50.

Adco

Adco is the powder that when mixed with straw, stalks, leaves, cuttings, garden waste of any kind, turns it into manure. This Adco Manure is *real* manure, identical chemically and in fertilizing power with the old-fashioned kind, but much cleaner.

7½-lb. bag (enough to treat about 100 pounds of dry material), \$1.

25-lb. bag (enough for 12 wheelbarrow loads of garden waste, making ½ ton of manure), \$2.

150-lb. bag (enough for a heap 10 x 10 x 6 ft., making about 3 tons of manure), \$10.50.



The modern and quick way to apply fertilizer to your lawn. It will save its cost in one season's use. Made of strong fiber-board paper with wooden handle. Wheels protected by iron tires. Shipped knocked down. Easily assembled. Price, 60 cts., postage 15 cts. extra.

Why Your Garden Needs**PEAT ^GPM MOSS**

G. P. M. Peat Moss is the finest grade, pure organic Peat Moss obtainable. It loosens heavy clay soils, gives body to sandy soils, it improves the texture of any soil; increases available fertility; stores up valuable moisture and water-soluble fertilizers for full use of plants. It aerates the soil and prevents hardening, and it promotes the development of vigorous root-growth—the secret of all luxuriant top-growth and beautiful flowers.

HOW TO USE G. P. M. PEAT MOSS

For Lawns and Gardens, mix moistened G. P. M. with the soil to a depth of 8 inches—about 1 bale to every 150 square feet—then add fertilizer and seed in the usual manner. G. P. M. holds fertilizers in suspension and prevents leaching—it promotes healthy root-development and luxuriant top-growth.

As a Protective Mulch against extreme heat of summer and freezing blasts of winter, spread G. P. M. around base of plants to a depth of 3 to 4 inches. In spring, dig G. P. M. under as excellent soil conditioner.

½-bus. bag, 25 cts.; 1-bus. bag, 45 cts.; ¼-bale sack, \$1.25, not prepaid. Large bale, \$2.75; 5-bale lots, \$2.65 per bale. Delivery prepaid in Pittsburgh and suburban districts



Triple Action Plant Foods

For Lawns and Flowers

Shrubs, Trees and Vegetables

You get added value and greater effectiveness from Wizard Natural Plant Foods because of these three distinctive and important features:

- 1. All Plant Food Elements.
Wizard supplies in a safe natural form all the elements needed to make plants thrive.
 - 2. Soil Building Humus.
Humus is a vital need of all soils and is supplied in abundance by Wizard. Humus is only supplied by Natural Organic Plant Foods.
 - 3. Beneficial Bacterial Action.
The vast store of plant food locked-up in all soils is liberated and made available to plants by the bacterial action that Wizard promotes.
- Wizard improves the physical condition and puts new life into worn-out soils. It is safe, absolutely weedless and lasting in effect.

Lawns.
Six to ten pounds to 100 sq. ft. in Spring and Fall will produce a thick green turf.

Flowers.
A handful mixed with soil under each new plant or 10 lbs. to 100 sq. ft. of bed area will insure luxuriant green foliage and an abundance of bloom.

Vegetables.
Wizard promotes quick, tender growth of high quality vegetables. Apply in hill or row or broadcast at rate of 6 lbs. to 100 sq. ft.

Shrubs and Trees.
The lasting qualities of Wizard make it the ideal food for trees and shrubs. It releases plant food continuously over a long period.

2 lbs.....	\$0 20
5 lbs.....	30
10 lbs.....	50
25 lbs.....	1 00
50 lbs.....	1 65
100 lbs.....	2 75
500 lbs.....	12 00
1,000 lbs.....	21 50
2,000 lbs.....	40 00
CATTLE MANURE	
Same price as Sheep Manure. Delivery: Refer to bottom of page 65.	

Nature's Perfect
Soil Builders

Sheep and Cow Manures

STERILIZED CONCENTRATED WEEDLESS

Lōma

THE PERFECT PLANT FOOD

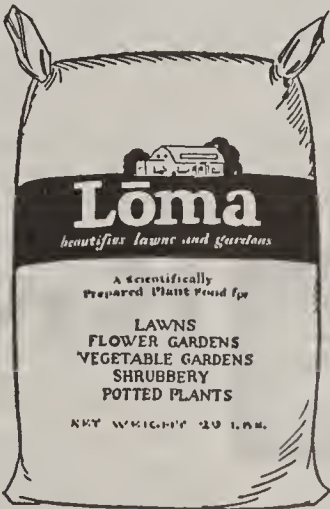
For
Lawns and Gardens

Beautifies Lawns, Vegetable Gardens, Flowers, Potted Plants, Fruit and Shade Trees

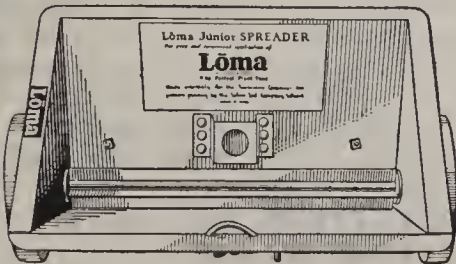
Lōma is a high-quality, complete plant-food, scientifically compounded from both organic and inorganic materials. It is rich in the elements vital to plant-life—Nitrates, Phosphates, and Potash—as well as other plant-nourishment.

Lōma is odorless, clean, entirely free from weed seeds, and is easy to apply. It is sown like grass seed, then wet down thoroughly.

Lōma contains all the food-elements that lawns and gardens need. There is not an ounce of filler or worthless material in Lōma. Every particle is a plant-food designed to perform a definite function in the scheme of promoting plant-growth. Feed Lōma at the rate of 4 pounds per 100 square feet for a balanced ration; 100 lbs. is ample for 2,500 square feet.



1-lb. can.....	\$0 10	25-lb. bag.....	\$1 50	} Delivery: Refer to bottom of page 65
5-lb. can.....	45	50-lb. bag.....	2 50	
10-lb. bag.....	85	100-lb. bag.....	4 00	



LōMA FERTILIZER SPREADERS

The 16-inch and 30-inch Spreaders are as rugged and dependable as of old. Hoppers made of galvanized iron, with patented, automatic shut-off controls. The agitator in both sizes distributes Lōma or grass seed in correct amounts, accurately regulated by the feeder-slides. The wide dashboard gives even distribution. A leg-rest is provided for convenient filling. The Lōma Junior Spreader embodies all of the mechanical features of the larger Lōma Spreaders and is \$2.50; the 16-inch is \$5.75; 30-inch \$12.50.

INSECTICIDES AND FUNGICIDES

The Insecticides and machines for applying them, described in this Catalogue, are not novelties in the experimental stage, but have been thoroughly tested and found reliable for the uses for which they are intended.

Customers using large quantities of Insecticides are requested to write to us for special prices, specifying the quantities wanted. Prices quoted are subject to change.

TO CONTROL CHEWING AND SUCKING INSECTS

Bowker's Powdered Arsenate of Lead

Can be used either as a spray or as a dust for all external chewing insects. It will not burn or injure your crop. It is the fineness of Bowker's Arsenate of Lead that causes it not only to spread and to stick better, but to kill better. Mixes easily, stays well in suspension, with no trouble from clogged nozzles. 1-lb. pkg. 25 cts., 4-lb. pkg. 75 cts., 25-lb. pkg. \$3.95, 100 lbs. (4 25-lb. pkgs.) \$15.

Bowker's Calcide

High-grade Calcium Arsenate

Excellent for potatoes and truck crops; it is cheaper than lead arsenate. Use Calcide to kill such pests as potato bugs, bean beetles, and other leaf-chewing insects. Calcide may be applied either wet or dry. 1-lb. pkg. 20 cts., 4-lb. pkg. 55 cts., 25-lb. pkg. \$2.80, 100 lbs. (4 25-lb. pkgs.) \$10.50.

Paris Green

1/4-lb. carton.....\$0 20
1-lb. carton..... 60
5-lb. carton..... 2 50

Dow's Magnesium Arsenate

Dow's Magnesium Arsenate is an effective insecticide for the control of the Mexican bean beetle and other chewing insects. It proves fully effective without damage to tender bean foliage. As a spray, use 6 teaspoonfuls to 1 gallon of water. For dusting, use 1 part Magnesium Arsenate to 3 parts hydrated lime. 12-oz. can 40 cts., 2-lb. bag 65 cts., 100-lb. drum \$22.50.



Pyrox

Kills Bugs—Prevents Blights

All you have to do to keep your farm crops free from leaf-chewing insects and fungous diseases is this: Mix Pyrox with water and spray. No need to waste time and effort mixing Bordeaux and arsenicals. It makes a fine mist and covers the foliage completely, sticking to the leaves even through the hardest rains.

Pyrox is especially recommended for potatoes. Thorough and frequent spraying will keep the vines healthy. Even when insects and diseases are not troublesome, Pyrox will stimulate the growth of the vines and increase yields. One pound makes 4 to 6 gallons of spray. 25 lbs. \$5, 50 lbs. \$7.25, 100 lbs. \$12.50, 300-lb. barrel \$30.

Grasselli's Dutox ^{Barium Fluosilicate}

A Control for Mexican Bean Beetle and Other Pests

Thousands of practical farmers endorse Dutox as an effective control for beetles and leaf-eating insects on vegetables, fruit, etc. They know by experience that Dutox means crop protection. It does not injure plants nor impair fertility of the soil. Used as a dust, it is applied either alone or diluted with inert ingredients, or it may be applied as a spray.

1-lb. bag.....\$0 35
6-lb. bag..... 1 35
Case, six 6-lb. bags..... 6 84

Powdered Hellebore

1/2-lb. box.....\$0 30
1-lb. box..... 50

Hammond's Slug-Shot

Hammond's Slug-Shot is used from ocean to ocean. A light, composite, fine powder, it is easily distributed either by dusters, bellows, or in water and sprayed. It is thoroughly reliable in killing the cabbage worm, bean beetle, and other leaf-chewing insects. 1-lb. can 25 cts., 5-lb. can 95 cts., 25-lb. bag \$3.

Hammond's No. 75 Rotenone Dust

A general-purpose Rotenone Dust that controls the Mexican bean beetle and most species of aphids, thrips, leaf-worms, beetles, larvæ, and other sucking and leaf-eating insects on vegetables, flowers, small fruit, etc. Does not contain arsenic. Ready to use. Requires 4 to 12 pounds to the acre. Lb. 30 cts., 5 lbs. 85 cts., 25 lbs. \$3.65, 50 lbs. \$7, 100 lbs. \$13.

Black-Leaf 40

Recommended by experiment stations and by spraying experts throughout the United States and the Dominion of Canada.

The standard contact insecticide for spraying vegetables, fruits, flowers, and plants to destroy aphids, thrips, leaf-hoppers, and similar "sucking" insects. Also effective for dipping purposes. One ounce makes 6 gallons of spray.

1-oz. bottle...\$0 35 | 2-lb. can...\$3 25
5-oz. can... 1 00 | 5-lb. can... 5 85
1-lb. can.... 2 25 | 10-lb. can...10 60

Rotecide Spray

Rotecide kills red spiders, cyclamen mites, mealy bugs, cabbage-worms, beetles, thrips, aphids (plant-lice), and various other insects unusually difficult to control. Rotecide is non-poisonous to birds, animals, or humans. It is a complete spray; simply add water.

1-oz. bottle...\$0 35 | 1-qt. can....\$3 00
8-oz. bottle... 1 00 | 1-gal. can... 8 00
1-pt. can.... 1 75 | 5-gal. can....35 00

Nursery Volck

Effective, Safe and Easy to Use

Ornamental shade trees, shrubs, conifers, and greenhouse plants require a great deal of care to preserve their natural beauty and vigor. Spraying with contact insecticides is the only satisfactory means of controlling the sap-sucking insects such as scales, mites, aphids, mealy bugs, white flies, thrips, leaf-hoppers, red spiders, etc. Especially adapted to nursery, greenhouse, and shade-tree spraying.

1/2-pt. can...\$0 35 | 5-gal. can...\$6 25
1-qt. can... 75 | 14-gal. can...14 00
1-gal. can... 2 00 | 28-gal. drum.25 20

Wilson's O. K. Plant Spray

A powerful, yet safe and efficient insecticide for general outside or greenhouse use. Positive control for most insects commonly found attacking flowering plants, shrubs, and ornamentals.

1 qt.....\$1 00 | 10 gals.....\$22 00
1 gal..... 3 00 | 30 gals..... 57 00
5 gals.....12 00 | 50 gals..... 90 00

Hammond's Grape and Rose Dust

Black-spot on roses, powdery mildew on grapes and flowers, blights, leaf-eating insects—all vanish after the use of Hammond's Grape and Rose Dust. A combined fungicide and insecticide used by professional growers for over a half century. 1-lb. can 35 cts., 5-lb. can \$1.25.

Pomo-Green With and Without Nicotine

A Leaf-green ALL-IN-ONE Dust or Spray

Pomo-Green prevents and controls black-spot, mildew, chewing insects and sucking insects on plants, shrubs, and roses quickly and effectively.

Protect new growth by dusting or spraying with Pomo-Green once each week throughout the growing season.

Pomo-Green with Nicotine. The all-in-one material. 1-lb. can 75 cts., 5-lb. can \$3.

Pomo-Green without Nicotine. Used to control diseases and leaf-eating insects only. 1-lb. can 50 cts., 5-lb. carton \$1.75.

Ever Green Spray

Ever Green Spray is the sure and safe way to kill both chewing and sucking insects easily and quickly. It is harmless to people, pets, and plants. Ready for use by simply mixing with water. A 1-ounce bottle will make 8 gallons of spray.

1-oz. bottle...\$0 35 | 1-gal. can...\$11 00
6-oz. bottle... 1 00 | 5-gal. can... 45 00
16-oz. can... 2 00

NICOTINE PYROX. See page 73.

RED ARROW. See page 73.

TO CONTROL FUNGUS, MILDEW, BLACK-SPOT, AND RUST



Bowker's Powdered Bordeaux Mixture

A powerful fungicide for the control of blights, rusts, and rots on any crops where Bordeaux is recommended by the experiment stations or other agricultural authorities. Fine, light, and fluffy, Bowker's Bordeaux mixes easily and completely. Hence it covers evenly and sticks well to the foliage. When bugs or worms are present, use Bowker's Pyrox in place of Bordeaux, as Bordeaux contains no poison. 1-lb. pkg. 25 cts., 4-lb. bag 75 cts., 25-lb. pkg. \$3.95, 100 lbs. (4 25-lb. pkgs.) \$15.

Bowker's Monohydrated Copper Sulphate

For use in all home-mixed dusts requiring Copper Sulphate. Contains approximately 35 per cent Metallic Copper. 12 1/2-lb. bag \$1.85, 100-lb. drum \$12.50.

"Bell-Mine" Rotary Kiln Lime

Used in spraying mixtures. Endorsed by leading agricultural authorities for Bordeaux Mixtures and for all other home-mixed insecticides and fungicides. Furnished in either pulverized, pebble, or lump form. 180-lb. steel pkg. \$2.65. Larger quantities quoted on request.

Superfine Dusting Powder

Controls mildew, black-spot, leaf-spot, and other fungous diseases on roses, chrysanthemums, phlox, delphiniums, snapdragons, and many other plants. 3-lb. sifter carton 40 cts., 10 lbs. 75 cts., 25 lbs. \$1.50, 50 lbs. \$2.50, 100 lbs. \$4.50.

Dow "Mike" Wettable Sulphur

Goes into suspension instantly and used as a spray. 10-lb. bag \$1.35, case (6 10-lb. bags) \$7.25.

Copper Sulphate (Blue Vitriol)

For making Bordeaux Mixture solution. Lb. 20c., 5 lbs. 75c., 10 lbs. \$1.25, 50 lbs. \$4, 100 lbs. \$7, 450-lb. bbl. \$29.25.

Sulfocide

A concentrated liquid sulfur fungicide for vegetables, flowers and fruits. Will control Anthracnose on beans, blight of potatoes, rust on snapdragons and phlox, and blight on roses. Ask for complete leaflet. (See also page 74.)

1-pt. can....\$0 50	1-gal. can....\$2 25
1-qt. can.... 85	5-gal. can.... 7 50

Fungtrogen

A preventive and remedy for mildew, black-spot, and other fungous diseases. Adds vigor to the plant. Mix with 60 times its volume of water.

4 ozs.....\$0 45	1 qt.....\$2 00
1/2pt..... 75	1 gal..... 6 00
1 pt..... 1 25	

Tri-ogen

Tri-ogen Spray Treatment gives complete protection against all diseases and insect pests. It is easily applied and also acts as a plant-stimulant.

A Small Kit...\$1 50	C Large Kit...\$6 00
B Medium Kit 4 00	D Estate Kit. 20 00

DORMANT SPRAYS FOR CONTROL OF SCALE

Scalecide

Scalecide has proved to be the most effective and safest oil spray for insects and fungous diseases that pass the winter on trees, evergreens, shrubs, and vines. For further description see page 74.

1-qt. can....\$0 65	5-gal can...\$5 75
1-gal. can.... 1 55	15-gal. drum. 13 25

Sunoco Self Emulsifying Spray Oil

Scale insects include some of the most dangerous enemies of horticulture. They are small, but propagate so rapidly that neglected trees quickly become incrustated with them. Do not allow these scales to gain a foothold. Sunoco applied as a dormant spray will control most all kinds of scale.

RUSTY EVERGREENS, caused by red spider, may be prevented by using Sunoco Spray in May or June. 15-gal. drum. \$8 25
1-gal. can....\$1 25 | 30-gal. drum. 13 80
5-gal. can.... 5 25 | 50-gal. drum. 19 00

Bowker's Liquid Lime Sulphur Concentrated

Prepared from the highest grade of lime and the purest sulphur, combined in especially designed apparatus and in quantities so large as to allow plenty of time for storage and settling. Thus, the solution which reaches you is cherry-red in color, clear and sparkling. It will not crystallize, thicken up in the barrel, or clog the finest nozzles. If used according to directions, Bowker's Lime Sulphur will kill every scale that it touches. 1-qt. can 50 cts., 1-gal. can 95 cts., 5-gal. can \$3, 30-gal. bbl. \$8, 50-gal. bbl. \$10.50.

F.O.B. our warehouse, 30-gal. bbl. \$7.20, 50-gal. bbl. \$9.50, 3 50-gal. bbls. \$27. Containers not returnable.

Agricultural Sulphur

Especially prepared for making Lime Sulphur solution. 99 1/2 per cent pure, 60 per cent through 40 mesh. 100 lbs. \$3.10, 500 lbs. \$13, 1,000 lbs. \$25, 2,000 lbs. \$48.

Bowker's Dry Lime Sulphur



Bowker's Dry Lime Sulphur is made by a special patented process which keeps the product in good physical condition, thus insuring its going into suspension quickly. It is used either as a dormant spray to kill scale or as a summer spray to control fungous diseases such as scab, rot, etc. 1-lb. pkg. 35 cts., 5-lb. pkg. \$1.50, 12 1/2-lb. bag \$1.75, 100 lbs. (8 12 1/2-lb. bags) \$11.75, 200 lbs. (16 12 1/2-lb. bags) \$22.50.

Stewart's Lime Sulphur Hydrometer

Gives specific gravity and Baumé readings. Complete with test-jar and instructions for use. \$1.25, postage 25 cts. extra.

Pratt's Spra-Cream. See page 74.
Tar Oil Sprays. See page 74.

GREENHOUSE INSECTICIDES AND FUNGICIDES

Nico-Fume Pressure Fumigator

Nico-Fume Powder packed in hermetically sealed cans. An effective greenhouse fumigant to destroy aphids, thrips, midges, etc. 1/2-lb. tins, 45 cts. each, \$2.40 for 6, \$4.20 per doz.; 1-lb. tins, 75 cts. each, \$3.75 for 6, \$7 per doz.

Nico-Fume Liquid

A highly refined solution of free nicotine, guaranteed to contain fully 40 per cent of nicotine. Extensively used for spraying or vaporizing in greenhouses to destroy aphids, thrips, etc. 1-lb. tin \$2.25, 4-lb. tin \$5.75, 8-lb. tin \$10.

Nico-Fume Tobacco Paper

Consists of sheets of paper impregnated with high-strength nicotine, folded and punched, ready to hang up and burn. Guaranteed to contain not less than 20 per cent of nicotine. 24 sheets \$1.25, postpaid \$1.40; 144 sheets \$4.50, 288 sheets \$8.

Selocide for Red Spiders

This selenium insecticide is extremely effective against red spiders, killing not only the spiders but their eggs as well. Will also do a good job in controlling mildew. One properly made application will clean up a serious infestation. Easy to mix.

1-qt. can...\$1 10	10-gal. drum.\$24 50
1-gal. can... 3 00	30-gal. drum. 58 50
5-gal. can... 13 50	

Lethane 440

Particularly recommended for the control of chrysanthemum midges, white fly, thrips, scale insects, orthezia, and red spider, as well as mealy bugs.

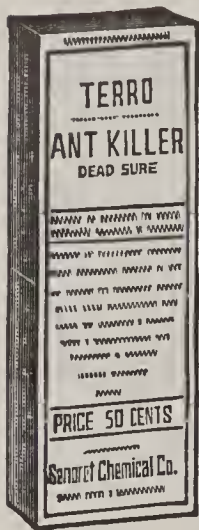
2-oz. bottle...\$0 35	1 qt.....\$3 00
6-oz. bottle... 1 00	1 gal..... 8 50
1 pt..... 2 00	5 gals.....35 00

CYANOGAS G. Fumigant. Fine for greenhouse and mushroom-house fumigation. In the greenhouse, 1/4 ounce per 1,000 cubic feet will control aphids, white fly, soft scale, thrips, and other greenhouse pests. (Booklet on request.)

5-lb. tin...\$3 00	100-lb. drum\$30 00
25-lb. tin...10 00	Not available.

Wilson's O.K. Plant Spray. See page 68.

To Control Ants, Moles, Rats, Mice, Groundhogs, etc.



Terro Ant Killer

Will drive ants in 24 hours from pantries, refrigerators, plants, flowers or any other place infested with them. Terro Ant Killer is a clean preparation in syrup form that cannot be blown into food or about the house and can be used without soiling or discoloring floors or receptacles. Terro is guaranteed to do the work or money back. Small size 25 cts., large size 50 cts. Postage 10 cts. extra.

ANTROL

Antrol is easy to use, economical, and safe around children and pets. It consists of small glass containers from which the worker ants carry Antrol Syrup to their nests for food. The whole ant family is quickly killed at the source—the only way to get permanent freedom from these pests.

The containers may be refilled and used year after year. Adapted to any size home or garden. Guaranteed.

REGULAR SET

Consists of 4 patented glass containers with rustproof aluminum lids, and one 4-oz. bottle of Antrol Syrup. Especially recommended for homes, estates, gardens, etc. May be used inside or out. 75 cts. per set. Postage 10 cts. extra.

READY-FILLED SET

Consists of 4 special glass "feeders" containing regular Antrol Syrup. Ideal for use in apartments, homes, camps, yards, etc. 40 cts. per set. Postage 10 cts. extra.

ANTROL SYRUP. 4-oz. bottle 35 cts., pt. 85 cts., gal. \$3.50.



Cyanogas Ant-Killer

Ants die instantly when you drop a little Cyanogas Ant-Killer into the entrance to the nest. It is simple and sure. The gas does the work—penetrates all through the nest. The queen and worker ants are killed instantly. 4-oz. tin 30 cts. (Not mailable.)

Magikil Jelly (Ant Bait)

A jelly bait that needs no feeders or traps. Simply place small doses in infested areas. Does not melt at ordinary temperatures. Endorsed by many state experiment stations. Garden tube 35 cts., estate tube 85 cts.



Carbon Disulphide

Recommended for killing ants, moles, woodchucks, and ground squirrels. For ants in hills, punch holes at intervals of 10 inches and pour a tablespoonful in each hole, then cover with burlap or similar covering. 1-lb. tin 50 cts. (not mailable.)

CYANO GAS

Cyanogas A Dust is acknowledged throughout the world to be the most effective pest destroyer. It is Calcium Cyanide which liberates hydrocyanic-acid gas when exposed to the natural moisture in the air and kills the pests wherever they are. They merely breathe the gas and die instantly. Effective for the extermination of moles, groundhogs, rats, mice, ants, fleas, wasps, and various other pests.

½-lb. tin... \$0 45	25-lb. tin... \$10 00
1-lb. tin... 75	100-lb. drum. 30 00
5-lb. tin... 3 00	Not mailable.

Weed Killers

Atlacide

A Non-Poisonous Weed Killer in Powder Form

Will exterminate all undesirable vegetation including Poison Ivy, Canada Thistle, Johnson Grass, etc., without danger of poisoning humans or animals. Especially recommended for obtaining weed-free driveways, paths, tennis-courts, and gutters. A pound will kill about 100 square feet of weeds.

5-lb. tin... \$1 50	50-lb. drum. \$7 00
15-lb. drum. 3 50	100-lb. drum. 13 50

Dandelion Killer

Quickly removes Dandelions from your lawn. It draws water from leaf and root until the whole plant is destroyed. Applied in the crown of the plant. Non-poisonous. 1-lb. can 35 cts.

Little Giant Self-setting Mole Trap

A durable Trap made of steel and heavily tinned. Easily set and a sure method of eliminating this pest.

16½ inches in height over all, 4⅝ inches wide, made of ⅝-inch band steel. Price \$1. Postage 20 cts. extra.



Mo-Lo

A preparation for the extermination of moles. The smell of MO-LO attracts the moles, they eat it and die underground. Poisonous. Pkg. (1 doz. tablets) 25 cts., doz. pkgs. \$2.75.

K-R-O KILLS RATS WITHOUT POISON

K-R-O is made of red squill, an ingredient recommended by the U. S. Government as sure death to rats and mice, but which will not kill anything else. 2-oz. size, 75 cts.; 4-oz. size, \$1.25; 8-oz. size, \$2. K-R-O Ready Mixed. 6-oz. size, 35 cts.; 22-oz. size, \$1, postpaid.

Pastoxine

Non-Poisonous. Guaranteed to Kill Rats

Is absolutely harmless to human beings, domestic animals, and poultry.

As little as 2 grains will kill a rat in from two to six hours, and it will go out in the open to die, thus eliminating all odors.

Pastoxine is approved by boards of health of leading cities and by the U. S. Department of Agriculture as not a misbrand. 1-oz. jar, 60 cts., postpaid.

Mouse Seed

Safer and more convenient than traps or any paste or powder preparations. Ready to use. No bait, no muss. 25 cts., postpaid.

Hammond's Weed Killer

Hammond's Weed Killer has been in use for many years, to prevent the growth of weeds. Will, naturally, kill any kind of vegetation without distinction, so it must be used cautiously where grass is desired. Dilute 1 gallon to 30 or 40 gallons of water. Qt. 50 cts., gal. \$1.50, 5 gals. \$6.25, 30-gal. drum \$30.

Adco Weed Killer

By its use it is possible to eliminate weeds, such as dandelions, plantains, etc., in the lawn without injury to the grass. It is a scientific product, the outcome of years of experiment, and will do all that is claimed for it. Non-poisonous and easy to use. One pound is enough for 100 square feet. 3-lb. can 95 cts., 25-lb. bag \$4.

Dan-D-Lion Killer Kemical

KILLER KEMICAL destroys all deep-rooted weeds without injury to the soil. Kills Dandelions, Thistles, Plantain, Buckhorn, and other common weeds. Is not poisonous or inflammable. Does not stain walks or clothing.

KILLER KANE insures easy and economical application. No stooping or back breaking. Place Kane on crown of dandelion or weed and press handle slightly. A small amount of Kemical is released and does all the work.

KILLER KIT (Kane and ½ gal. Kemical). \$1.95.
GIANT KIT (Kane and 1 gal. Kemical) \$2.75.

KILLER KEMICAL
1-qt. can... \$0 85
½ gal. 1 25
1 gal. 2 00
5 gals. 8 75
Killer Kane 1 00



Seed and Soil Disinfectants and Seed Inoculation

Semesan

For flower and vegetable seeds and to control brown-patch

Diseases carried on the seed often reduce germination and cause a poor stand, lowered quality, and unsatisfactory yields. Destroy these disease organisms without injuring the seed by treating your seeds, bulbs, roots, corms, and tubers with Semesan. Easily and quickly applied as a dust or liquid. Effective in controlling damping-off of seedlings. One ounce treats 15 to 30 pounds of seed. Semesan also controls brown-patch in lawns and is recommended where soil-fertility is high.

2-oz. tin 35 cts., 1-lb. tin \$2.25, 5-lb. tin \$9.90, 25-lb. pail \$45.50, 100-lb. drum \$180, 300-lb. drum \$535.



New Improved Ceresan

For seed-grains

New Improved Ceresan is unusually effective for controlling bunt or stinking smut of wheat, loose and covered smuts of oats, covered smut and stripe of barley, and seedling blight caused by seed-borne scab. One-half ounce treats about a bushel of seed. Is easily and quickly applied. Frequently improves the stand of grain and increases yields.

1-lb. tin 70 cts., 5-lb. tin \$3.

New Improved Semesan Bel

For seed potatoes

An instantaneous treatment requiring no time-consuming soaking. Highly effective in controlling such destructive seed-borne diseases as scab and rhizoctonia. Protects the seed-piece against rotting by soil organisms. Improves germination and usually produces a bigger crop of better quality. One pound treats 60 to 80 bushels of seed.

4-oz. tin 45 cts., 1-lb. tin \$1.50, 5-lb. tin \$6.75, 25-lb. pail \$31, 100-lb. drum \$122, 300-lb. drum \$355.

New Improved Semesan Jr.

For seed corn

A simple, quick, inexpensive dust treatment that destroys harmful disease organisms on the seed, protects seed from rotting in cold, wet soil, controls seedling blight, reduces root- and stalk-rots, and generally increases crop-yields. Only 2 ounces necessary per bushel of seed field or sweet corn. Costs only 1½ cents an acre.

4-oz. tin 35 cts., 1-lb. tin \$1, 5-lb. tin \$4.75, 25-lb. pail \$21.

Special Semesan

For brown-patch

Special Semesan is a combination of two organic mercury compounds. It prevents and controls large and small brown-patch, or dollar spot. It has proved effective, yet is low in cost per application. For severe attacks use at the rate of 1 pound in 100 gallons of water to 6,000 square feet. Special Semesan may be applied at the rate of 1 pound to 6,000 square feet in dry form if thoroughly mixed with compost.

5-lb. tin \$7, 25-lb. pail \$33, 100-lb. drum \$129.

Nu-Green

For brown-patch

Regular applications of Nu-Green prevent or control the development of brown-patch and assist normal, healthy turf-growth. Nu-Green is advised for treatment where the soil-fertility is low. One pound of Nu-Green in 50 gallons of water treats 1,000 square feet of turf by sprinkling, or applied with a power sprayer, from 1,000 to 2,500 square feet.

3 ozs. 35 cts., lb. \$1.45, 5 lbs. \$6.30, 25 lbs. \$29, 100 lbs. \$115. Free pamphlet.

Corrosive Sublimate

Mercuric Chloric, Bichloride of Mercury

Recommended for the control of large brown-patch in bent grasses, also prevents damping-off of vegetable and flower seedlings.

¼-lb. bottle 75 cts., 1-lb. bottle \$2, 5-lb. bottle \$7.50, 25-lb. box \$31.25. (Not available.)

Calogreen

Calomel, Mercurous Chloride

Used extensively in the control of small brown-patch.

Lb. \$2.40, 5 lbs. \$10.50, 25 lbs. \$44.50.

**ALL Legumes
Should Be
INOCULATED
with**

**F HIGH BRED NITROGEN
FIXING LEGUME BACTERIA
FARMOGERM**

Get bigger crops and richer soil with Farmogerm. *FARMOGERM* bacteria are from selected strains. Taken from plants grown in jelly. They come to you in a jelly medium, packed in the bottle with the ventilated stopper. They draw the nitrogen from the air which all bacteria must have to live. Inoculate—**ALL CLOVERS, SOY BEANS, ALFALFA PEAS, BEANS, VETCHES.**

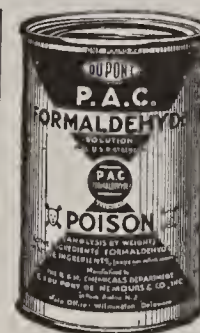
*Endorsed by Leading
Agricultural Authorities*

FARMOGERM Price List
FOR ALL CLOVERS AND ALFALFA (Small Seeds)
½ BU. 45¢
1 BU. 75¢
2½ BU. 1.50
FOR ALL VETCHES PEAS AND BEANS, SOY BEANS AND COW PEAS. (Large Seeds)
1 BU. 45¢
2 BU. 75¢
5 BU. 1.50

Garden Size. For Garden Peas, Beans, and Sweet Peas, 25 cts.

Note. Important. When ordering Farmogerm don't fail to state the kind of legumes to be inoculated.

Formaldehyde



For wheat and barley smut, use one pint of Formaldehyde in 40 gallons of water. Sprinkle or dip seed in tubs; cover several hours; sow damp. For oat smut, spray oats with one pint Formaldehyde in 10 pints of water. Sack or sow.

For Potato Scab and Rhizoctonia

Soak potatoes 3 or 4 minutes in warm solution (124° to 126° Fahr.) of 1 pint Formaldehyde in 15 gallons water. Small lots on the stove in washboiler; larger lots in tank heated with tank heater or by steam from tractor or other boiler.

Treat soil with Formaldehyde to overcome root-rot of most vegetables (U. S. Bulletin No. 217). Will prevent onion smut, lettuce rosette and rot, tobacco bed-rot, and damping-off fungi.

Lb. can 35 cts., 10 1-lb. cans \$3, 50 1-lb. cans \$13, 60-lb. keg \$9.50.

Ask for booklet and full directions.

Form-O-Fume Formaldehyde Dust

Damping-off is a costly plant disease well known to growers. It is characterized by a rotting of the seedling at the soil-line or by decay of the roots. This destruction or stunting of young plants is due to fungi which live in the soil and attack the roots and stems of seedlings in order to obtain nourishment. This saps the strength of the young plants and they are weakened or die. Form-O-Fume treatment is easily applied, quick in action, certain in results, and very economical. It protects against the loss of expensive seed and saves valuable time otherwise spent in replacing "damped-off" plants.

1-lb. can 50 cts., 5-lb. can \$1.75, 25-lb. drum \$5, 50-lb. drum \$7.50, 100-lb. drum \$13.

Cuprocide Red Copper Oxide

Recommended to prevent seed-decay and damping-off. It assures profitable stands even under adverse conditions.

Cuprocide can be used on both vegetable and flower seeds—simply shake a small portion together with the seed. This is a safe and very cheap treatment.

4-oz. can 35 cts., lb. 90 cts., 5 lbs. \$4.

Terogen

Destroys the spores of fungi of most diseases that have fallen to the ground, as well as the larvae of most insects. Makes sturdy, healthy foliage and helps to prevent chlorosis. Recommended as a summer-autumn ground-dressing and soil-disinfectant for rose-beds.

Lb. 75 cts., 2 lbs. \$1.25, 5 lbs. \$2.75, 25 lbs. \$11.

Napthalene Flakes

Used principally to kill thrips on gladiolus bulbs in storage during winter. About 1 pound is required for 2,500 gladiolus bulbs.

Lb. 25 cts., 3 lbs. 65 cts., 10 lbs. \$1.95.

To Control Cutworms, Earthworms, Grubs, Sowbugs, Borers, etc.

Paradow

Unadulterated Paradichlorobenzene For Peach-Tree Borers

Paradow is recommended for the control of peach-tree borers. When placed around the base of a peach tree, it will generate a gas that will kill the borers in that tree. Should be used in spring or fall when trees are not growing vigorously. Use about 1 ounce per tree. Full directions on container. 1-lb. pkg. 50 cts., 5-lb. pkg. \$1.85, 25 lbs. \$7, 50 lbs. \$12.

Vermol Worm Eradicator

For Golf Greens and Fine Lawns

The best of the non-poisonous class of worm-killing preparations. A powder that is harmless to animals, but remarkably effective in promptly bringing earthworms to the surface and killing them. Apply Vermol at the rate of one pound to 18 square feet and water in thoroughly. Vermol will not injure the grass.

25 lbs.	\$2 25	500 lbs. ..	\$30 00
50 lbs.	3 75	1,000 lbs. ..	57 50
100 lbs.	6 50	2,000 lbs. ..	110 00

Snarol

Cutworms, sowbugs, grasshoppers, slugs, snails, earwigs, etc., are quickly exterminated.

Snarol is a ready-prepared meal that you simply broadcast on the ground, under the vegetation. Pests eat it at night and are quickly destroyed.

Snarol will not deteriorate from rain or sprinkling. Thus it lasts longer and is more economical. It is non-injurious to vegetation when used according to simple directions. 1½-lb. pkg. 35 cts., 4-lb. pkg. 85 cts., 15-lb. bag \$3, 50-lb. bag \$8.

Miscellaneous

Kayso

Spray Spreader and Adhesive

Kayso is the combined casein spreader and adhesive, recommended by experts in horticulture and used by progressive fruit- and vegetable-growers and florists throughout the United States.

Because of increased spreading and wetting properties, a tank of spray containing Kayso will cover more trees than ordinary spray. Kayso reduces waste of spray by preventing it from collecting in drops and rolling off the smooth surfaces of fruit, leaves, and bark. Kayso raises the market value of your fruit by reducing spray-burn and by producing finer finished and more evenly colored fruit. 2 lbs. 65 cts., 100 lbs. \$19.

C. P. O.

Insecticide Soap-Spreader

C. P. O. is a Soap-Spreader that replaces fish-oil soaps.

It is used as a Spreader for both nicotine and pyrethrum when spraying for many forms of aphids, red spider on evergreens, mealy bug on chrysanthemums, lace-bug on azaleas and rhododendrons, juniper scale, euonymus scale, pine-needle scale, and most insects infesting plants grown outdoors and in greenhouses.

It is odorless, non-poisonous, and does not discolor the foliage.

C. P. O. Liquid

1-qt. can.	\$1 00	5-gal. can.	\$8 50
1-gal. can.	2 50	10-gal. can.	12 50

C. P. O. Solid

6-lb. can.	\$1 75	50-lb. keg.	\$9 50
25-lb. can.	5 50	100-lb. keg.	15 50

Whale-Oil Soap

Effective in destroying many sucking insects and lice on plants, trees, ferns, etc. It is an excellent wash to use on rose bushes, porch flowers, vines, rubber plants and palms. Also used as a Spreader and adhesive where required. ½-pt. can 35 cts., 1-pt. can 65 cts., 1-qt. can \$1, 1-gal. can \$3, 5-gal. can \$12.

Tree Tanglefoot

A sticky material for banding trunks of trees, vineyards, etc., to protect them against the ravages of climbing insect pests.



No mixing is required. It comes ready for use and is easily and quickly applied with a wooden paddle. One pound makes 15 to 20 lineal feet of band.

6 ozs. 35 cts., 1b.	65 cts., 5 lbs. \$3,
10 lbs. \$5.65, 25 lbs. \$12.	

Tobacco Dust

A specially ground Tobacco Dust, guaranteed to contain not less than ½ of 1 per cent nicotine. It is particularly useful in vegetable- and flower-gardens, in greenhouses and orchards, wherever a dusting powder is desired to destroy plant-lice. Owing to its extreme fineness it readily floats in the air, enveloping the entire shrub or tree in a dense cloud. 2-lb. carton 25 cts., 10-lb. pkg. 75 cts., 100-lb. sack \$3.25, 500 lbs. \$15.

Tobacco Stems

Bale (about 200 lbs.) \$2.50, 3 bales \$7.

Stanley's Crow Repellent

Protects Your Corn

during the period when it is most easily damaged, by ridding your crop of crows and other corn-pulling birds, and animal pests, such as moles, gophers, woodchucks, squirrels, etc.

It positively will not clog any planter. It protects seed from rotting in the ground. It will not kill birds or animals, but will keep them away. 1-qt. can, enough for 4 bus. seed,



\$1.75, 1-pt. can, enough for 2 bus. seed, \$1, ½-pt. can, enough for 1 bus. seed, 60 cts.



"DOGZOFF"

If you are bothered with dogs, cats, or rabbits, "Dogzoff" is the spray you need. It is a most efficient animal repellent and one spraying will last from three to four weeks. Not poisonous to plants and will not injure animals. Not offensive to humans. Applied with any small insect sprayer. Bottle 60 cts., postpaid.

S-W Pruning Compound

Possesses all the qualities necessary in a preparation to properly protect pruning wounds. It successfully checks the weathering of the wound and also prevents the growth of bacteria. 1-pt. can 45 cts., 1-qt. can 75 cts., 1-gal. can \$2.50.

Bartlett Tree Paint

A tree-wound dressing in liquid form, of asphalt base and other ingredients necessary to protect the tree after pruning. Used by orchardists, tree experts, and state foresters. To thin, use pure linseed oil. Applied with a brush. Pt. 60 cts., qt. \$1, gal. \$2, 5 gals. \$6.50.

Trowbridge's Grafting Wax

This brand of Grafting Wax is the oldest brand on the market, and is of the most even consistency and elasticity of any. It is used by softening in warm water, or by the warmth of the hand. It can then be drawn out as thin as paper and spread on the cut and around the graft. ½-lb. pkg. 30 cts., 1-lb. pkg. 50 cts.

Willson Dustite Respirator

Protects your nose, mouth, throat and lungs when spraying, dusting, threshing, etc. \$2.25.

DELIVERY: At prices given in this catalogue, Insecticides and Fungicides are delivered prepaid on orders amounting to \$2 or more. On orders less than \$2, include postage at rates given on page 1 under Parcel Post Shipments.

KILLS BOTH SUCKING *and* CHEWING INSECTS

Controls Mexican Bean Beetle, Japanese Beetle, and other Resistant Insects

RED ARROW GARDEN SPRAY is a highly concentrated pyrethrum soap spray. Simply mix with water—no spreader need be added. It is absolutely harmless to humans, animals, and birds as it leaves no poison residue. Red Arrow is an all-purpose garden spray. It is especially recommended for aphids, mealy bug, squash and potato bugs, leaf-hoppers, thrips, Mexican bean beetle, Japanese beetle, cucumber beetle, cabbage and tomato worm, rose-bug, aster and dahlia beetle, and many other varieties of insects attacking vegetables,

flowers, and fruits. Also kills ants in lawns and gardens. Will not injure foliage or affect fertility of the soil.

Protect Bulbs from insects in the soil or in the bulb itself by soaking in Red Arrow Spray solution before planting. Also, when bulbs are taken up and stored.

1 oz. ....\$0 35	Qt. ....\$4 00
4 ozs. ... 1 00	Gal. ....12 00
Pt. 2 50	



If You Prefer Powder, Use

Black Arrow 5000 Pyrethrum Dust

Non-poisonous—composed of pyrethrum powder and other insecticidal factors combined with a special carrier.

1 lb. ....\$0 50	10 lbs. ....\$3 40
5 lbs. 1 80	25 lbs. 8 00



A Complete Spray

Nicotine Pyrox

TRADE MARK REGISTERED

Nicotine Pyrox protects plants against insect pests, blight, and other fungous diseases. Because it contains all the necessary ingredients properly and scientifically blended, Nicotine Pyrox is a complete garden spray. It contains nicotine to combat sucking insects, arsenic poison to control leaf-eating insects, as well as a copper ingredient which provides protection against fungous diseases.

Nicotine Pyrox comes in a mixed paste form, ready to use. Just dilute with water, and spray. It sticks to the

foliage and does not easily wash off, providing a lasting protection. The paste form of spray material is recognized by authorities as the most efficient form of spray material because it permits the finest mist-like spray which settles like fog over the plant, completely covering the surface of the foliage. Such a fine mist-like spray as Pyrox provides is possible only because Pyrox is a chemical precipitate which makes the minute Pyrox particles many times finer than any dry, powdered material can be ground.

17.6-oz. jar (makes about 3½ gals. spray) 50 cts., 5-lb. drum \$1.75, 10-lb. drum \$3



A Powerful, Non-Poisonous, Low-Cost Spray

For Chewing and Sucking Insects

Kills and repels aphids, Japanese beetle, Mexican bean beetle, elm leaf beetle, tent caterpillar, thrips, rose-bug, cabbage worm, currant worm, leaf-hopper, and many similar insects.

D-X is the latest scientific word in contact sprays. It is the result of the combined efforts of a group of leading entomologists; contains 99 per cent active ingredients; no soap or spreader is necessary or desirable. D-X will not stain or injure the tenderest foliage; combines with lime-sulfur, Bordeaux, arsenate of lead and standard insecticides. Dilutes 1 to 800 for aphids, stronger for more resistant insects.

1½-oz. bottle.....\$0 35	1-pt. can.....\$1 75	1-gal. can.....\$7 50
½-pt. can..... 1 00	1-qt. can..... 2 75	5 gals.....30 00

SCALECIDE

THE COMPLETE DORMANT SPRAY

"Makes a Tree Outgrow Its Troubles"

Since 1904, Scalecide has been famous for its effectiveness against the San Jose scale and all other scale insects, because it has always been a miscible oil of the highest quality. But Scalecide is not only a scale spray; it kills all other pests which winter on the tree. It is the complete dormant spray. Applied as a delayed dormant spray in the spring, diluted 1 to 15 (12 gallons to a 200-gallon spray tank), Scalecide controls aphids, European red mite, pear thrips, and red bug; diluted 1 to 12½ (15 gallons to a 200-gallon spray tank), it also controls leaf-roller. Applied in the fall (1 to 15), Scalecide controls peach leaf-curl and pear psylla. Either fall or spring spraying with Scalecide (1 to 15) controls scale, bud-moth, case-bearer, leaf-miner and fungous cankers.

Scalecide-Sulfocide Combination

Scalecide 1 to 100, combined with Sulfocide 1 to 200, is the ideal pre-pink and pink spray for apples. It not only controls late-hatching aphids and aphids which the ants bring on to the trees after the dormant spray, but also thrips, red bug, and soft-bodied sucking insects.



1 qt.	.....	\$0 65
1-gal. can	.....	1 55
5-gal. can	.....	5 75
15-gal. drum	\$11.25. Returnable drum extra \$2.	13 25
30-gal. drum	\$18.50. Returnable drum extra \$2.50.	21 00
50-gal. drum	\$26. Returnable drum extra \$3.	29 00

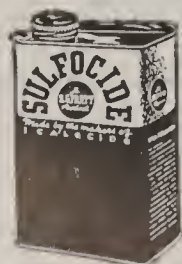
Deposit on drum refunded when returned to B. G. Pratt Co., Hackensack, N. J., prepaid
Price on 5 drums and upwards quoted on request. ASK FOR SCALECIDE BOOKLET

SULFOCIDE

A Better Summer Spray

A concentrated liquid sulfur fungicide in soluble form. When sprayed, decomposes into sulfur in its finest colloidal form on the fruit and foliage. For apple scab, brown rot of peaches, plums, and cherries; for blight and rot on potatoes, tomatoes, and melons. One of the finest bean sprays known. Used for mildew and rust on flowers and shrubs. Dilutes 1 gallon to 200 gallons of water. For brown rot at picking-time on peaches and cherries use ½ gallon Sulfocide and 1½ pounds of soap to 100 gallons of water.

Fungous diseases can be prevented, but they can seldom be cured. Therefore early spraying is very important, and additional sprays should be put on at frequent intervals to protect the new growth.



PRICES

1-pt. can	.....	\$0 50
1-qt. can	.....	85
1-gal. can	.....	2 25
5-gal. can	.....	7 50
10-gal. can	.....	13 50
30-gal. drum	.....	33 00
50-gal. drum	.....	50 00

Drums not returnable

Spray Ornamentals with Scalecide

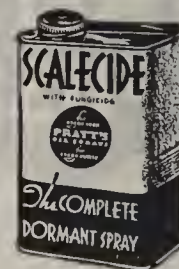
Spray any tree or vine which drops its foliage in winter with Scalecide, just before the buds start in the spring. Spray lilacs, rose bushes, and other shrubs. Use Scalecide, 1 to 15, on maples, dogwoods, elms, and other shade trees. This spray is for San Jose scale, oyster-shell scale, scurfy scale, tulip scale, red mite, woolly aphids, green aphids, etc., as well as building up the general vigor and vitality of the trees.

For conifers, spruces, pines, etc., spray with Scalecide, 1 to 20, just before the new growth starts in the spring.

For evergreens, euonymus, etc., spray at the same time with a dilution of 1 to 25.

Para-Scalecide Method

For control of peach borers stir in 1 pound of Paradow (paradichlorobenzene) to 1 gallon of Scalecide. Dilute this combination with 7 gallons of water and spray ground around base of tree and trunk 8 inches above the ground, using approximately 1½ pints per tree. Mound after application. Ask for booklet.



PRICES

Straitar

An 85 per cent emulsified coal-tar creosote oil. Contains no lubricating oil. For dormant control of green and rosy aphids. General dilution 3 gallons to 100 gallons of water. 54-gal. drum \$23.22. Returnable drum extra, \$3. Total \$26.22.

Tar-O-Wash

Combination 37 per cent tar oil, 46 per cent lubricating oil emulsion for aphids, San Jose scale and red mite. 6½ gallons to 100 gallons of water. 54-gal. drum \$18.90. Returnable drum extra, \$3. Total \$21.90.

Spra-Cream

An 83 per cent oil emulsion made from selective oils. Used for dormant or delayed dormant spraying. 4 to 4½ gallons to 100 gallons of water. Combines with Nicotine or Lime-Sulfur. 54-gal. drum \$14.04. Returnable drum extra, \$3. Total \$17.04.

Citrus Spra-Cream

A highly refined summer oil for summer control of codling moth, pear psylla, red mite, leaf-hoppers. Combines with Arsenate of Lead or Nicotine Sulphate. Generally used 1 gallon to 100 gallons of water. 54-gal. drum \$18.90. Returnable drum extra, \$3. Total \$21.90.

Deposit on drums refunded when shipped to B. G. Pratt Company, Hackensack, N. J., prepaid.

Stakes



Wooden, Round, Tapering, painted green. Light Stakes are made from western white pine and the heavy from cypress.

	Doz.	100
1½ ft. long, light weight.....	\$0 35	\$1 75
2 ft. long, light weight.....	50	3 25
3 ft. long, light weight.....	1 00	6 00
4 ft. long, light weight.....	1 40	8 75
3 ft. long, heavy weight.....	1 50	9 75
4 ft. long, heavy weight.....	1 85	12 75
5 ft. long, heavy weight.....	2 50	16 25
6 ft. long, heavy weight.....	3 00	20 00

Hyacinth. 12 in. long.....\$0 35 100 \$2 00
18 in. long.....45 2 50

Japanese Bamboo Canes. Dyed green. Uniform pencil thickness throughout. Just the thing for pot-plants and plants that need just a light support.

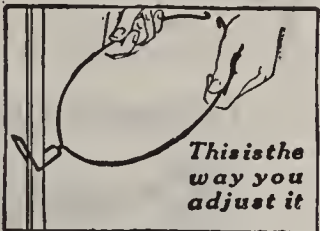
	Doz.	50	100	1,000
2 ft. long...	\$0 10	\$0 25	\$0 40	\$2 75
3 ft. long...	15	35	60	4 25
4 ft. long...	20	50	90	6 75

Heavy Bamboo Tonkin Stakes. Make excellent supports for dahlias and plants of this type.

	Diam.	Doz.	50	100
4 ft. ½ to ⅝ in.....	\$0 60	\$2 00	\$3 00	
5 ft. ⅝ to ¾ in.....	75	2 50	4 00	
6 ft. ¾ to ⅞ in.....	85	2 75	4 50	
8 ft. ⅞ to 1 in.....	1 00	3 50	6 00	

Adjusto Plant Supports

A sturdy, hard-wood stake seven-eighths inch square, with a strong wire support instantly adjustable to any height. A suitable support for tomatoes, dahlias, peonies, and all similar plants.



	Each	Doz.		Each	Doz.
3 ft....	\$0 25	\$2 10	5 ft....	\$0 30	\$2 70
4 ft....	28	2 40	6 ft....	35	3 00

Dennis Plant Stakes

A substantial support for dahlias and all similar plants. Made of clear pine, ¾ inch square, with rattan reed to fasten or hold plant.

	Each	Doz.	10 doz.
No. 441. 3 ft.....	\$0 10	\$1 00	\$9 00
No. 442. 4 ft.....	15	1 25	11 00
No. 443. 5 ft.....	20	1 50	13 50

Garden or Pot Labels (Painted)

	100	500	1,000
4 in. x ⅝ in. wide....	\$0 40	\$1 50	\$2 50
5 in. x ⅝ in. wide....	45	1 65	2 75
6 in. x ⅝ in. wide....	50	1 75	3 00
8 in. x ⅝ in. wide....	1 00	3 75	6 25
10 in. x ⅝ in. wide....	1 15	4 50	7 50
12 in. x 1 ⅝ in. wide...	1 60	6 50	11 00
3½ in., copper-wired.	60	2 00	3 25

Simplex Green Weatherproof Plant Labels

For permanent identification of roses, dahlias, and other plants in garden and rockery. Copper-wired.

	Doz.	100
No. 31. 3 x ½ in.....	\$0 40	\$2 50
No. 32. 4 x ¾ in.....	60	4 00
No. 33. 5 x 1 in.....	85	5 50

Steel Stylus only, 10 cts. each.

Wire Hanging-Baskets

10-in. diam. 35 cts.; 15-in. diam. 60 cts. each.

Earthen Flower Pots



Standard Pots

Inside diam.	Doz.	100
2½ in....	\$0 30	\$1 75
4 in....	50	3 40
5 in....	90	6 00
6 in....	1 35	9 00
7 in....	2 25	15 00
8 in....	3 25	21 50
9 in....	5 00	33 00
10 in....	6 75	45 00
12 in....	13 50	

Flower-Pot Saucers

Inside diam.	Each	Doz.	Inside diam.	Each	Doz.
4 in....	\$0 04	\$0 40	8 in....	\$0 18	\$1 60
5 in....	06	50	9 in....	22	2 10
6 in....	08	75	10 in....	32	3 25
7 in....	15	1 15	12 in....	50	5 00

Azalea Pots

Inside diam.	Each	Doz.	100
6 in. x 4¾ in. deep....	\$0 15	\$1 35	\$9 00
7 in. x 5¼ in. deep....	22	2 25	15 00
8 in. x 5¾ in. deep....	32	3 25	21 50
9 in. x 6¼ in. deep....	50	5 00	33 00
10 in. x 6¾ in. deep....	65	6 75	45 00

Low Pans

Inside diam.	Each	Doz.	100
5 in. x 3¼ in. deep....	\$0 10	\$0 90	\$6 00
6 in. x 3½ in. deep....	15	1 35	9 00
7 in. x 3¾ in. deep....	22	2 25	15 00
8 in. x 4 in. deep.....	32	3 25	22 00

Cedar Plant Tubs

Made of seasoned, selected Virginia white cedar, bound with electric welded wire hoops, and painted with the best oil paints—a handsome green color inside and out. Regularly furnished with no handles.



	Inside top diam.	Inside bot. diam.	Inside depth	Each
No. 1.	6 in.	5 in.	6 in.	\$0 50
No. 3.	8 in.	6 in.	8 in.	65
No. 5.	10 in.	7½ in.	9 in.	85
No. 7.	12 in.	9 in.	11 in.	1 25
No. 9.	14 in.	11 in.	13 in.	1 75
No. 11.	16 in.	12½ in.	15 in.	2 10
No. 13.	18 in.	14½ in.	17 in.	3 00

If stamped steel handles are desired, add 25 cents per tub, extra.

Fibre Flower-Pot Saucers

Light and durable; glazed surface, easy to clean. Will not scratch or mar woodwork. Mahogany finish.

	Outside diam.	Each
No. 6330. 11¾ in. fits 10¼-in. pot....	\$1 00	
No. 6337. 14¼ in. fits 12½-in. pot....	1 50	
No. 6341. 16 in. fits 14½-in. pot.....	1 75	
No. 6345. 17½ in. fits 16-in. pot.....	2 00	

Rolling Stands

A strong and compact support for plants in pots and tubs. Made of two steel bands and equipped with ball-bearing casters. Each

	Each
No. 12. Fits No. 6330 Saucer.....	\$2 00
No. 14. Fits No. 6337 Saucer.....	2 40
No. 16. Fits No. 6341 Saucer.....	2 75
No. 18. Fits No. 6345 Saucer.....	3 00

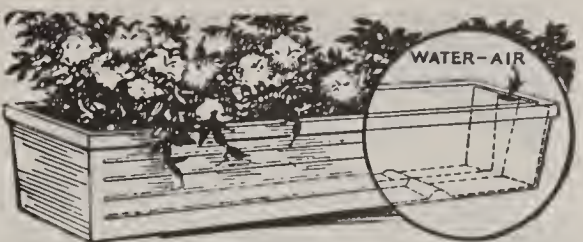
Raffia

For tying, bunching, basket-making, and fancy work.

Natural. In plaits. Lb. 35 cts., postpaid 45 cts.; 10 lbs. \$3, postpaid \$3.25.

Green. Bundle (about 1 lb.) 95 cts., postpaid \$1.05.

Natural Green Moss. In sheets. Bag, about 2 bushels, \$1.50.



The Perfecto Flower-Box

Proper Irrigation : Proper Ventilation

Provides correct, approved, scientific principles for raising luxuriant plants and flowers indoors or outside. Patented system with water entrance at both ends feeds water properly at roots of plants and circulates air beneath soil; keeps it from souring. Finished in green enamel.

14 in. long, 6 in. deep, 7 in. wide.....	\$0 85
20 in. long, 6 in. deep, 7 in. wide.....	1 00
26 in. long, 6 in. deep, 7 in. wide.....	1 25
32 in. long, 6 in. deep, 7 in. wide.....	1 50
38 in. long, 6 in. deep, 7 in. wide.....	2 00
44 in. long, 6 in. deep, 7 in. wide.....	2 50



Wotherspoon Watering Pots

Heavy galvanized iron, reinforced; well made and substantial. Each pot has a long spout, with one fine and one coarse rose. Will outlast two or three ordinary pots.

Round Pattern.

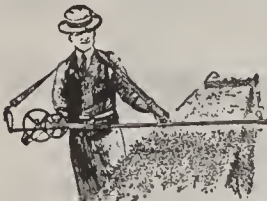
8-qt.....	\$5 25
10-qt.....	5 75
12-qt.....	6 25

Lisk Galvanized Watering Pots

	Each
4-qt.....	\$0 75
6-qt.....	85
8-qt.....	95
10-qt.....	1 10
12-qt.....	1 25
14-qt.....	1 40

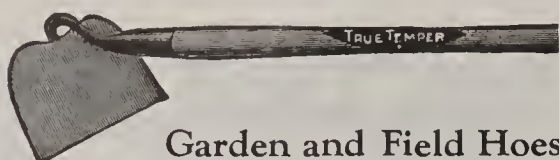


Little Wonder Hedge Trimmer



A proved success for many years. Thousands in use. A model and size to meet every condition. Trims every variety of hedge five to ten times faster than hand shears. Makes hedge-cutting a pleasure. Built sturdy and yet light. Cutting blades are of high-grade steel, frame of duralumin. One-year guarantee with each machine. Ask for special circular.

	Electric	Hand-driven
27-in. Hedge Trimmer.....	\$55 00	
30-in. Hedge Trimmer.....		\$25 00
36-in. Hedge Trimmer.....	95 00	
40-in. Hedge Trimmer.....		27 50
60-in. Hedge Trimmer.....	100 00	35 00
Electric models furnished with 15 feet of wire Side-Cutting Carriage for 30-in. and Each 40-in. sizes.....		\$4 50
High-Quality Rubber-Covered Wire, 100-ft. length.....		4 50

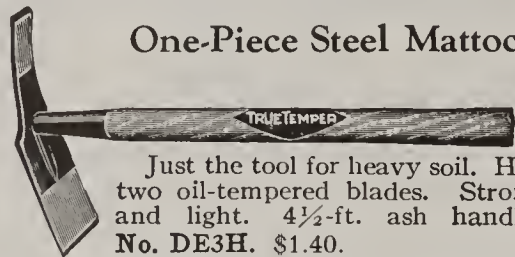


Garden and Field Hoes

No. G. 4 1/3-ft. handle, steel socket, best quality. 6- and 6 1/2-in. blade, \$1.15 each; 7 and 7 1/2-in. blade, \$1.25 each.

No. PG. 6 or 7-in. blade, 4-ft. handle, steel socket, light weight. 85 cts.

No. LY5 Ladies' Hoe. 5-in. blade, 95 cts.

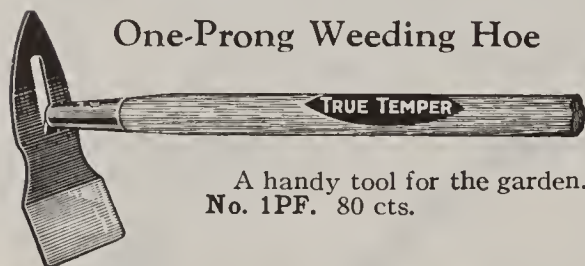


One-Piece Steel Mattock

Just the tool for heavy soil. Has two oil-tempered blades. Strong and light. 4 1/2-ft. ash handle.

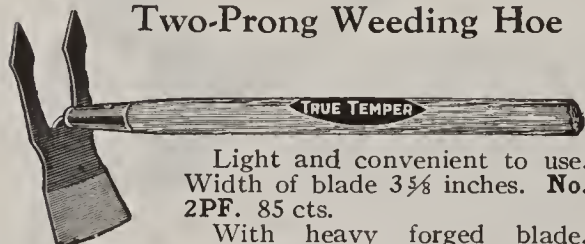
No. DE3H. \$1.40.

No. DE3. Two-piece. \$1.25.



One-Prong Weeding Hoe

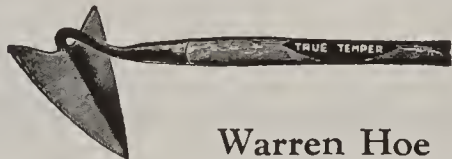
A handy tool for the garden. No. 1PF. 80 cts.



Two-Prong Weeding Hoe

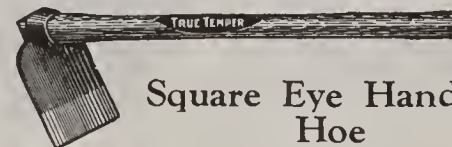
Light and convenient to use. Width of blade 3 3/4 inches. No. 2PF. 85 cts.

With heavy forged blade. No. 2PH. \$1.10.



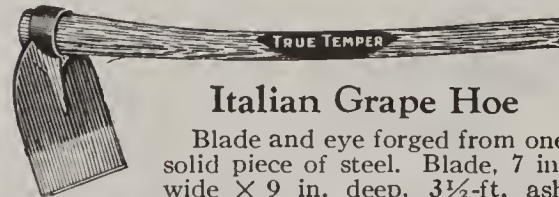
Warren Hoe

No. W. 7 1/2-in. blade, 4 1/3-ft. handle. \$1.45. Baby Warren Hoes No. BW. 4 1/2-in. tempered steel blade, 6 1/2-in. handle. 75 cts.



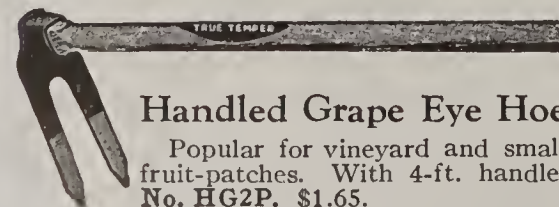
Square Eye Handled Hoe

Forged and drawn from one solid piece of steel. 4 1/2-ft. handle. No. GE6-O. With 4 1/2-in. blade, 90 cts. No. GE3-O. With 6-in. blade, \$1.



Italian Grape Hoe

Blade and eye forged from one solid piece of steel. Blade, 7 in. wide X 9 in. deep, 3 1/2-ft. ash handle. A heavy tool for heavy work. No. IGH7. \$2.10.



Handled Grape Eye Hoe

Popular for vineyard and small fruit-patches. With 4-ft. handle. No. HG2P. \$1.65.

Potato Hook

Four diamond-back tines; goose neck. 4 1/3-ft. handle. No. 4GND. \$1.35.



Norcross Hand Garden Cultivator

5-prong, 4-ft. handle.....\$1 25
3-prong, 4-ft. handle.....1 00
Midget, 9-in. handle.....60

Midget by parcel post, 10 cts. extra; 3-prong and 5-prong, 15 cts. extra.



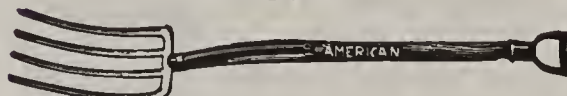
Speedy Cultivator

A very useful tool for work around flower-beds, shrubs, and roses. No. SC4. With 4 tines, \$1. No. FW3. With 3 tines, 95 cts.

Spades

Garden. D-handle, blade 7 1/2 x 12 in...\$1 75
Garden. Long handle, blade 7 1/2 x 12 in. 1 75
Drain. D-handle, blade 5 1/2 x 16 in. 1 90
Nursery. For heavy work. Blade 5 3/4 x 12 3/4 in.....4 10

Forks



Spading Forks

No. OHW. Tines 11 in. long, wood D-handle.....\$2 00
No. OHD. Tines 11 in. long, steel D-handle.....1 75
No. B4D. Tines 8 1/2 in. long, Boy's steel D-handle.....90

English Digging Fork

No. ED4. Square tines 11 1/2 in. long. Wood D-handle.....3 00



Hay Forks. Oval tines, strap ferrules.

No. 034B. 4-ft. handle.....\$1 45
No. 034 1/2 B. 4 1/2-ft. handle.....1 50
No. 035B. 5-ft. handle.....1 60
No. 035 1/2 B. 5 1/2-ft. handle.....1 75
No. 036B. 6-ft. handle.....1 90



Manure Forks. Oval tines, strap ferrules, bent handle.

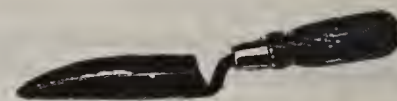
No. 044. 4-tine, 4-ft. bent handle...\$1 70
No. 04D. 4-tine, iron D-handle....1 70
No. 064. 6-tine, 4-ft. handle.....2 05
No. 06D. 6-tine, iron D-handle....2 05



Ensilage or Barn Forks. Half polished oval tines. Steel D-handle.

No. 506. 6 15 1/2-in. tines.....\$2 70
No. 508. 8 16-in. tines.....2 85
No. 510. 10 16-in. tines.....3 35

Garden Trowels



No. 211

No. 211. Forged steel. 5-in. 75 cts., 6-in. 80 cts., 7-in. 85 cts.

No. 215. English Pattern. 6-in. 25 cts



No. 217

No. 217. Transplanting. 6-in. 20 cts., 7-in. 25 cts., 8-in. 30 cts.

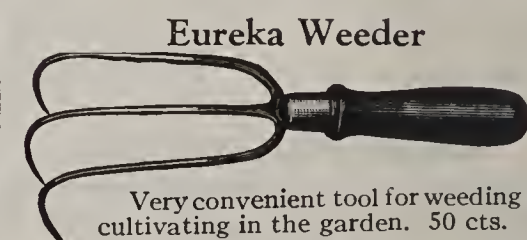


No. DST. Forged from one solid piece of steel and tempered. 95 cts.



Gem Garden Spade

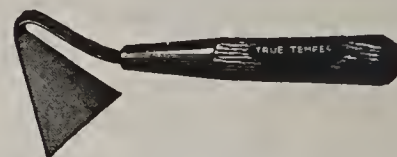
A handy tool where careful cultivation is required. 50 cts.



Eureka Weeder

Very convenient tool for weeding and cultivating in the garden. 50 cts.

Triangular Steel Weeder



Used extensively for close garden-work among young, tender plants. No. 3W. 3-in. blade, 8-in. handle, 50 cts. No. 34W. 3-in. blade, 4-ft. handle, 80 cts.



True Temper Weeder

Made from special high-grade steel. No. BW1. 60 cts.

Hazeltine Weeder

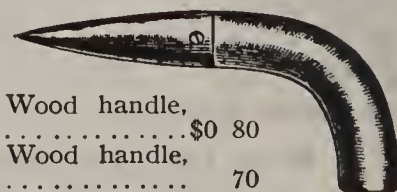
Same style as True Temper Weeder except lighter material. No. 200. 40 cts.



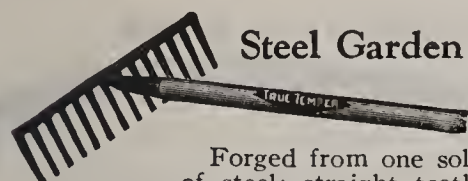
Asparagus Cutter

No. 2500. Used also as a weeder and dandelion digger. 40 cts.

Dibbles



No. 218. Wood handle, usual size.....\$0 80
No. 219. Wood handle, small size.....70
No. 220. All iron. Weight, 2 lbs.....65

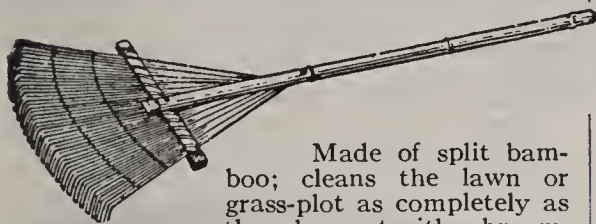


Steel Garden Rake

Forged from one solid piece of steel; straight teeth; hammer-drawn, single shanks.

10 teeth.....\$1 05	16 teeth.....\$1 30
12 teeth.....1 15	18 teeth.....1 45
14 teeth.....1 20	

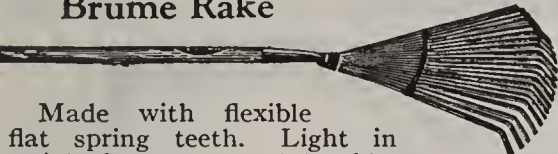
Japanese Broom Rake



Made of split bamboo; cleans the lawn or grass-plot as completely as though swept with a broom.

18-in.....\$0 60	30-in.....\$1 50
24-in.....90	

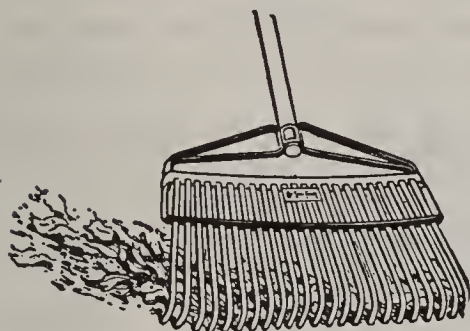
Brume Rake



Made with flexible flat spring teeth. Light in weight but strong and durable.

No. FBR22. \$1.

The Lawncomb



This rake has flat steel teeth and a steel frame. It is just what its name implies. Width 18 in.

No. LC18. \$1.25 each.

Turf Edger

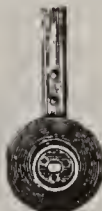


No. 040F. For trimming edges of walks and driveways. Flat top blade. 4-ft. handle, \$1.15.

Planet Jr. Grass Edger

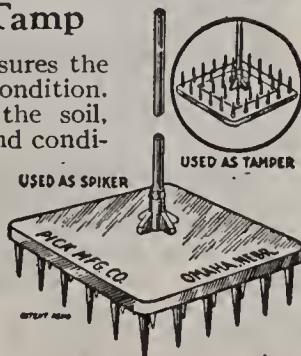
Has sharp edge steel disc with 36-inch handle. Edges straight or curved walks quickly and easily.

No. 2. \$1.50, postage 20 cts. extra.



Spike Lawn Tamp

Spiking a lawn assures the maintenance of its condition. It admits air into the soil, loosens the root-bound condition of the grass and permits water to enter the soil. Plate 9 in. square, spikes 1 3/4 in. long, weight 11 1/2 lbs. \$3.50.



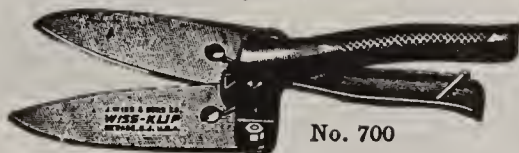
Grass Shears



No. 2

No. 2. Little Giant Grass Shears. 5 1/2-in., full polished, cutlery steel blades. Malleable handles. 75 cts.

No. 600. Wiss Quality Grass Shears. \$1.25.



No. 700

No. 700. Wiss Grass Shears. Operates with an easy up-and-down movement. \$1.25.

No. 701. With narrow blades for working in close places. \$1.25.

Grass and Sheep Shears

No. 200E. 5 1/2-in. Full polished. 60 cts.

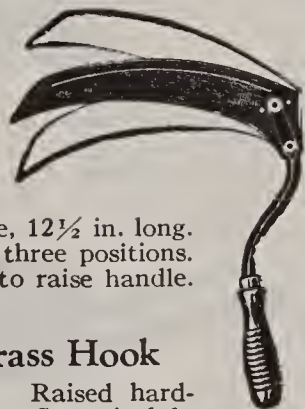


No. 1105. 6 1/2-in. Finest quality cutlery steel; trowel shank. \$1.25.



No. 71. 6 1/2-in. Best quality Sheffield steel English Shear. \$4.50.

Little Giant Adjustable Grass Hook



Cutlery steel blade, 12 1/2 in. long. Blade adjustable to three positions. Steel shank shaped to raise handle. 65 cts.

Nowatoco Grass Hook

Solid steel blade. Raised hardwood handle. 50 cts. Same in left-hand style, 60 cts.

English Grass Hook



Blade finest Sheffield steel riveted to heavy back. \$1.

German Blue Blade Grass Hook

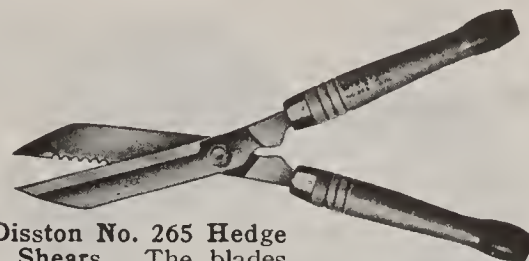
Thin blade of high-tempered steel. 65 cts.

Austrian Grass Hook

Has 5-inch shank. Used extensively by cemeteries, golf clubs, etc. 85 cts.

Oakland Grass Hook

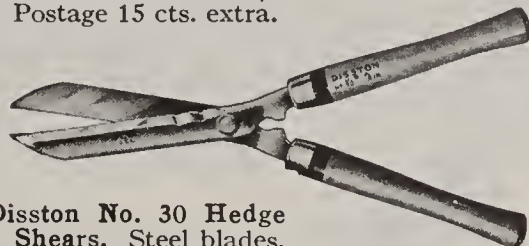
Solid steel blade, 18-inch handle. 85 cts.



Disston No. 265 Hedge Shears. The blades are 1 3/4 inches wide, hollow-ground and polished. One blade serrated to prevent slipping. Blade and shank made from one piece of forged steel.

6-in. blade..\$1 50	9-in. blade...\$2 15
8-in. blade..1 95	10-in. blade...2 35

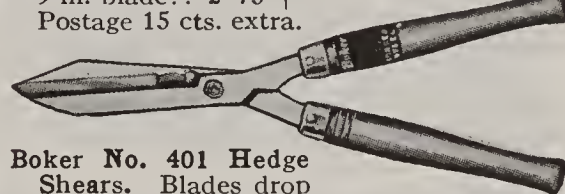
Postage 15 cts. extra.



Disston No. 30 Hedge Shears. Steel blades, half-oval, hollow-ground, full polished, hardened and tempered; hardwood handles tangs extend entire length of handle. Tension device eliminates spring.

8-in. blade..\$2 50	10-in. blade...\$3 00
9-in. blade..2 75	

Postage 15 cts. extra.



Boker No. 401 Hedge Shears. Blades drop forged steel and polished ash handles. Copper plated, rustproof ferrules. The 7- and 8-in. sizes are notched; the 6-in. size is not notched.

6-in. blade..\$0 75	8-in. blade...\$1 25
7-in. blade..1 00	

Postage 15 cts. extra.

The Doo Klip Long-Handle Grass Shears

Particularly desirable for use under bushes or shrubs, it also works perfectly along walks, foundations, and all difficult places. Operated from a standing or erect position. Handle 33 inches long. \$2.50.



AS CUT FROM BUSH

Garden Club Flower Shears

Made of quality steel. Will not rust. \$1.25.

Eversharp Flower Shears

Just the Shears for cutting and gathering flowers. Snips and holds in one operation. No. 1248. 60 cts.



Moe's Fertilizer Spreader and Seeder

Spreads uniformly any dry pulverized commercial fertilizer, pulverized lime, ashes, bonemeal or grass seeds. Easy acting spiral agitator. Quick adjustment of the feed, any desired opening or complete shut-off. Runs easily. Works either way, push or pull. Hopper is of galvanized steel. Wood handle and steel wheels.

No. 500. Size 12 x 20 inches, and 10 inches deep. Capacity about 2½ pecks of fertilizer. \$6.50.

No. 505. Size 9½ x 16 inches, and 8 inches deep. Capacity 25 pounds of fertilizer. \$3.

Other Fertilizer Spreaders shown on pages 66 and 67

Shovels

No. FE23. Fox Round Point. D-handle. \$1 75

No. FL29. Fox Round Point. Long handle. 1 75

No. FE11. Fox Square Point. D-handle 1 75

No. FL17. Fox Square Point. Long handle. 1 75

No. BE72. Star Coal Shovel. D-handle. 1 75

No. CXL0. Ladies' Garden Shovel. Round point; long handle. 1 25



No. AFSD. Automobile Spade. Forged steel blade 5 x 8 in. Length overall, 24 in. 80 cts.

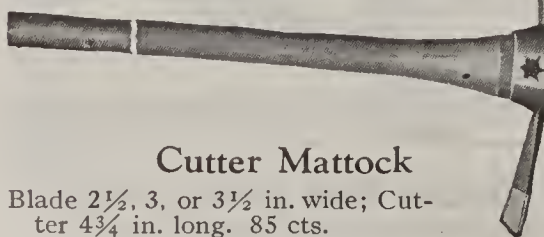
No. FSD. Floral Shovel. Similar to above. Length overall, 38 in. 90 cts.



Champion Wire Scoop. The lightest and strongest Potato Scoop made. Specially recommended for the handling of corn, potatoes, and vegetables. Blade 13 in. x 16 in. Steel D-handle, wood grip. \$2.50.

Little Digger Garden Mattock

Made of forged steel. Light in weight but sturdily built. Double-blade style, as illustrated, or Blade and Cutter style, each \$1.25.



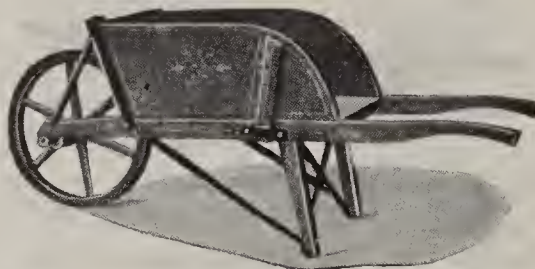
Cutter Mattock

Blade 2½, 3, or 3½ in. wide; Cutter 4¾ in. long. 85 cts.

Blade 3, 3½, or 4 in. wide; Cutter 5¼ in. long. 95 cts.

Railroad Picks. 2 in. wide chisel end, weight 5 lbs., 85 cts. 2 in. wide chisel end, weight 6 lbs., 95 cts.

Pittsburgh Garden Barrows



These Barrows are made of thoroughly seasoned wood, have double frames, firmly bolted together and iron braced. They are neatly finished and very strong.

No. 1. Large. Body, 30 x 24 in.; sideboards, 12 x 30 in.; wood wheel, 1¾ x 22 in. Weight, 65 lbs. Price \$9.25.

No. 2. Medium. Body, 28 x 20 in.; sideboards, 12 x 27 in.; wood wheel, 1¾ x 20 in. Weight, 50 lbs. Price \$7.75.

No. 5. A high-grade, well-made Barrow at a low price. Will give good service for a long time. Body, 26 in. long, 19 in. wide front, 23 in. wide rear; sideboards, 12 in. high; handles, 56 in. long. Steel wheel. Weight, 50 lbs. Price \$6.

Extra for 3-in. Tire Wheel on No. 1 or No. 2 \$0 50

Extra for 5-in. Tire Steel Wheel on No. 1 or No. 2 1 25

Extra for 16 x 4-in. Pneumatic Rubber Tire Wheel on No. 1 or No. 2 6 00

Steel Tray Barrows



No. 20. Home Barrow. An exceptional Barrow for light work and general use around the home and garden. Tray of one-piece steel. Channel steel legs. Steel wheel 15½ in. diam. Capacity, 2½ cu. ft. Weight, 40 lbs. Price \$4.50.



No. 15A. Adapted to cement or construction work or hauling manure. Designed with round front tray, so that materials will dump and clean easily. Hardwood handles, steel tray, and steel legs. Steel wheel, 15½ in. diam. A substantial Barrow that will stand a lot of hard usage. Weight, 65 lbs. Capacity, 3½ cu. ft. Price \$7.85.

No. 154. Same design as No. 15A. Weight, 70 lbs. Capacity, 4 cu. ft. Price \$8.25.

No. 155. Same design as No. 15A. Weight, 75 lbs. Capacity, 5 cu. ft. Price \$9.

Sieves

Constructed from the best steel wire cloth. Wood sides, 3½ inches inside depth, well braced. Can be used for screening soil and also for cleaning grain.

No. 4. ¼-in. mesh; **No. 6.** ⅜-in. mesh; **No. 8.** ½-in. mesh. \$1 each.

Scythes and Snaths



Little Giant Grass Scythe, with Dutch Heel. 30 to 32-in. \$1.85.

True Temper "World's Finest" Grass Scythe. With wide Dutch heel. Briar edge. 28 and 30-in. \$2.

English Riveted Back Scythe. 30 to 34-in. \$3.

German Blue Blade Scythe. Width of blade at heel, 4 in., length 30 in. Thin blade type; fully warranted. \$2.

German Blue Blade Scythe. With American heel. Can be used with patent snath. \$2.

Genuine Austrian Schwanen Sense Scythe. Straw-tempered finish with picture of two swans on blade. \$2.25.

Little Giant Grain Scythe. 48-in. \$2.25.



Weed Scythe, Heavy Pattern. 26 to 28-in. \$2.



Bush Scythe, Heavy Pattern. 18 to 22-in. \$2.

Sharpening Outfit for German and Austrian Scythe. Consists of Hammer (without handle) and Anvil. Weight, 1 lb. \$1.25. Postage 10 cts. extra.

Patent Grass Snath No. 55. With loop bolt and nut. \$1.50.

Bush Snath No. 105. With loop bolt and nut. \$1.75.

Straight Snath, S3. For German and Austrian Scythes with ring and wooden wedges. \$1.50.

True Temper Grass Cutter. Double serrated-edge blade. 9 inches long; length overall 38 inches. No. 29. \$1.

Nowatoco Scythook. For cutting light bushes, weeds, and grass. Blade 18 in. long; handle 4½ ft. long. \$1.25. Postage 10 cts. extra.

Little Giant Long-Handle Grass Hook. A useful tool for parks, cemeteries, golf grounds, etc. Blade 12½ in. long; handle 3½ ft. long. (Not illustrated.) \$1. Postage 10 cts. extra.



Little Giant Bush Hook. Crucible steel blade, double cutting edge; 30-in. hickory handle. \$2.75.

Blood's Bush Hook. Forged blade, one cutting edge; 36-in. hardwood handle. \$2.

Kelly Axes



Forged, with crucible steel bit welded upon a mild steel body. Scientifically patterned; bursts the chips easily. Does not bind in the wood. 36-in. extra-quality hickory handle.

Single Bit, 3½ or 4-lb. \$2.10; 4½ or 5-lb. \$2.25; 5½-lb. \$2.35.

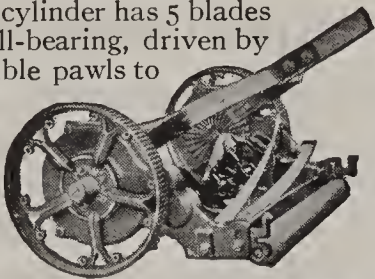
Double Bit, 3½ or 4-lb. \$2.65; 4½ or 5-lb. \$2.75; 5½-lb. \$2.85.

Pennsylvania Quality Lawn-Mowers

Pennsylvania Junior Lawn-Mower

This is the standard Mower for general trimming, and probably is used on more private estates, parks, cemeteries, and golf-courses than any other Mower. The cylinder has 5 blades 6 inches in diameter; self-aligning ball-bearing, driven by a train of 3 gears on both sides; double pawls to prevent slipping. It will cut the toughest grass and give a smooth finish.

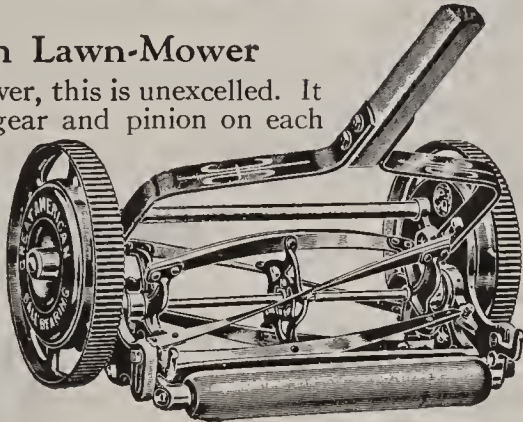
	Weight	Price
15-inch.....	41 lbs.	\$20 00
17-inch.....	43 lbs.	22 00
19-inch.....	45 lbs.	25 00
21-inch.....	48 lbs.	28 00



Great American Lawn-Mower

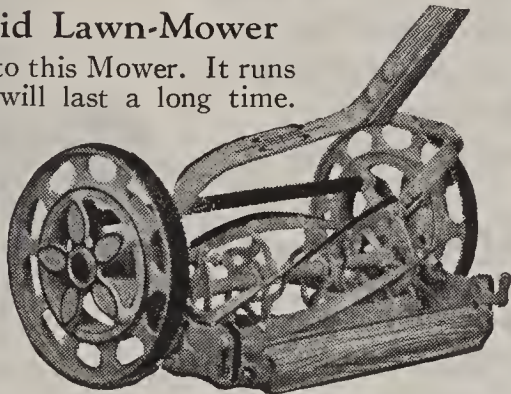
As a general utility Mower, this is unexcelled. It is driven by an internal gear and pinion on each side, making it easy to push. The cylinder has 5 blades; self-aligning ball-bearings. Wheels are 10 inches in diameter.

	Weight	Price
15-inch...	38 lbs.	\$15 00
17-inch...	40 lbs.	17 00
19-inch...	42 lbs.	19 00
21-inch...	45 lbs.	21 00



Pennsylvania Orchid Lawn-Mower

A lot of value is built into this Mower. It runs easily, cuts cleanly, and will last a long time. The cylinder is extra large for cutting high grass. Has 10-inch wheels and five crucible tool steel blades. Lower blade has a raised cutting edge. The ball-bearings are well protected from dust and dampness and are automatically kept in adjustment by a spring. 15-in. (38 lbs.), \$11; 17-in. (40 lbs.), \$11.50.

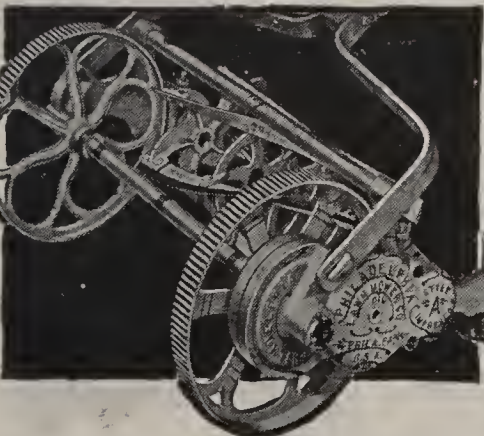


Pennsylvania Orchid Bent Lawn-Mower

This is the Pennsylvania Orchid Mower with 7 blades for cutting creeping bent grasses. 17-in. (43 lbs.), \$16.

Catalogue and Price-List of Pennsylvania Fairway Mowers and Greens Mowers on request

The Genuine "PHILADELPHIA" Lawn-Mower

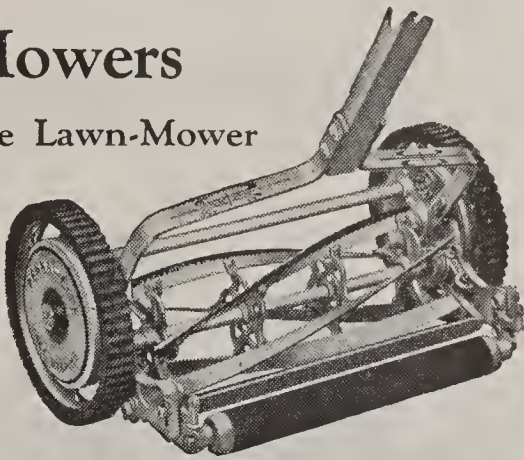


This Mower is especially designed for use on large lawns and meets the most exacting demands. Being all-steel construction it is practically indestructible. It is so constructed that the revolving cutter can be removed for sharpening without disturbing any of the parts. Has four blades, 10-inch wheel, 6 5/8-inch cylinder, train of three gears and double ratchet.

Style "A." 15-in., \$22; 17-in., \$25; 19-in., \$28; 21-in., \$31.

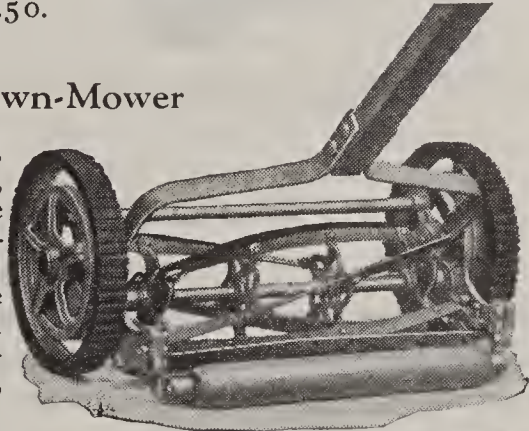
Quiet Penna-Lite Lawn-Mower

A high-grade feather-weight Lawn-Mower weighing only 31 pounds. Unexcelled for terraces. Runs so easily that a child can handle it. The drive wheels, 10-inch diameter over-all, are equipped with solid rubber tires, and the wood roller is encased with rubber, eliminating unnecessary noise. Five crucible tool-steel blades, oil-hardened and tempered, and automatic spring adjustment on ball-bearings. 17-inch cut, \$17.50. Penna-Lite Lawn-Mower. Without rubber tires and covered roller. 17-in. cut, \$15.50.



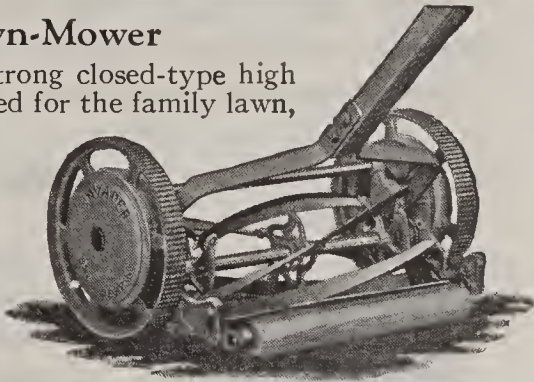
Primos B Lawn-Mower

An honestly built, high-quality Mower, well adapted for the household lawn. Has 10-inch drive wheels with solid rubber tires, five crucible steel blades, and self-adjusting ball-bearings. 16-in. (43 lbs.), \$10.50.



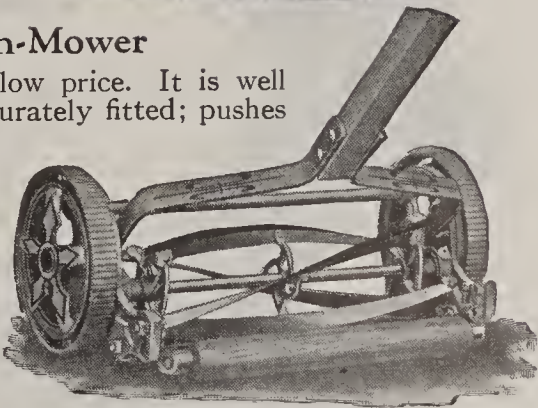
Invader Lawn-Mower

This Mower, with its strong closed-type high wheels, is especially adapted for the family lawn, being well made, light running, and smooth cutting. Has 10-inch solid wheels, five hardened steel blades, and self-adjusting ball-bearings. 14-in. (32 lbs.), \$7.25; 16-in. (34 lbs.), \$7.50; 18-in. (36 lbs.), \$8.



Sturdy Lawn-Mower

A quality Mower at a low price. It is well built and all parts are accurately fitted; pushes easily and cuts cleanly, leaving a nice, smooth finish to the lawn. Has 8-inch wheels, four hardened steel blades, and self-adjusting ball-bearings. 12-in. (30 lbs.), \$5.95; 14-in. (31 lbs.), \$6.20; 16-in. (32 lbs.), \$6.45.



Pennsylvania Combined Lawn Trimmer and Edger

An efficient ball-bearing Lawn Trimmer and Edger built for durability and service. Cuts to 1/4 inch of walls, posts, trees, etc., and is equipped with steel disc and a small plow for trimming overhanging grass along the edges of paths and flower-beds. Has 4 blades; cuts 6 inches. Weight, 22 lbs. (Not illustrated.) \$9.

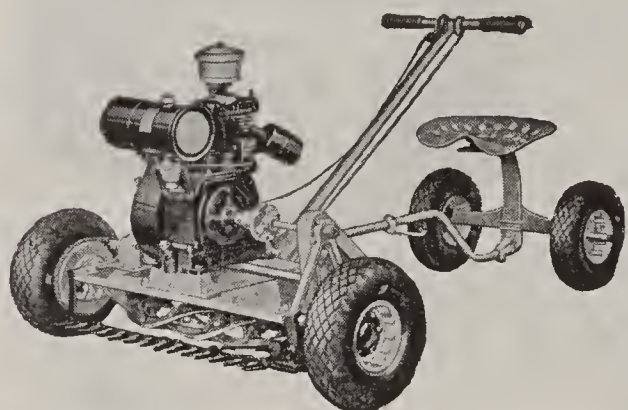
Easy-Emptying Grass-Catchers

No. 10G.	Depth 19 in., fits 12 to 18-in. Mower.....	\$1 25
No. 12G.	Depth 21 in., fits 16 to 22-in. Mower.....	1 65
No. 16G.	Depth 16 in., fits 12 to 17-in. Mower.....	80
No. 18G.	Depth 16 in., fits 16 to 20-in. Mower.....	1 00

*For 19 Years the Preference of
Users of Power Lawn-Mowers*

MOTO-MOWER

The Super-Detroit Moto-Mower



Super-Detroit Model with Pneumatic Tires,
Sulky, and Sickle-bar

Possessing such sturdy construction and perfect balance, the Super-Detroit cuts every kind of grass efficiently and with least exertion to the operator. Strong and powerful though it is, "twist-of-the-wrist" guiding makes the Super-Detroit (30-inch cut) as responsive to the touch as a light Hand Mower. Consequently, the operator can now mow 4 to 5 acres per day with it every day of the season without experiencing fatigue. Equipped with a 2-horsepower 4-cycle engine. Price, with Iron Wheels, \$315.

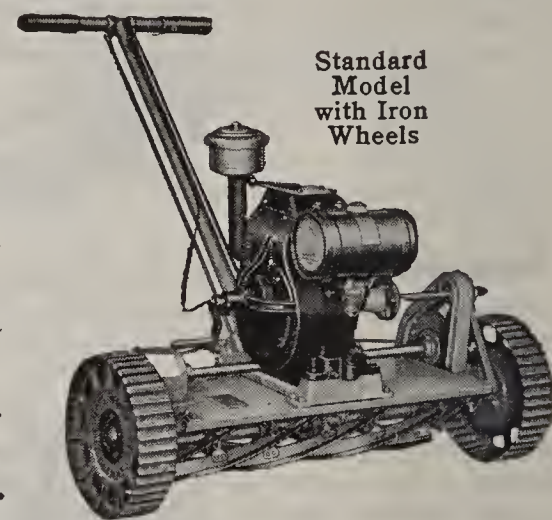
Can be furnished with Pneumatic Tires, Sulky, Trailer Cutting Units, and Sickle-bar.

Standard Model Moto-Mower

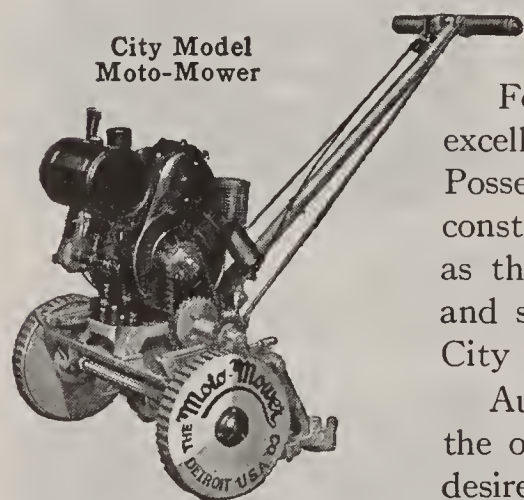
Every inch a Moto-Mower, which means rugged construction, ample power, ease of operation, and "twist-of-the-wrist" guiding. Width of cut, 24 inches. Particularly well adapted for cemetery use and will give a good account of itself on any lawn. Cutting capacity, 3 to 4 acres per day.

Is the same construction as the Super-Detroit and is powered with a 1-horsepower engine. Price, with Pressed Steel Wheels, \$252.50.

Can be had with Iron Wheels, or Pneumatic-tired Wheels and Sickle-bar.



Standard
Model
with Iron
Wheels



City Model
Moto-Mower

City Model Moto-Mower

For smaller lawns, the City Model Moto-Mower, 22-inch cut, has proved an excellent machine. It will efficiently and easily mow $2\frac{1}{2}$ to 3 acres of grass per day. Possessing "twist-of-the-wrist" guiding, automatic engine control, and the finest construction and materials, the City Model is just as valuable and efficient a machine as the larger Moto-Mowers. A hand-lever makes starting easy. Rugged motor and simplified design guarantee years of thorough, economical operation for the City Model owner.

Automatic speed-control, which the City Model possesses in common with all the other Moto-Mowers, enables the operator to set the engine at any speed he desires, and, by means of an automatic governor, the machine will run at that speed through all grades and thickness of grass, assuring an even, scientific cut with least exertion to the operator. Price, with Slip-on Rubber Tires, \$202.50.

Lawn-Peer Model Moto-Mower

A sturdily built Roller Mower that has desirable features for satisfactory and easy operation. Its cutting width is 20 inches, making it suitable for cutting narrow garden paths and trimming turf along driveways and around flower-beds and shrubbery. The motor is air-cooled, easy to start, of simplified design, and has ample power; oil-splash lubrication and float-feed carburetor fitted with air-cleaner. Has throttle control and automatic governor controlling set speed. Cutting unit has throw-out reel and five crucible steel blades assuring a perfectly smooth cut. Price, \$235.



Lawn-Peer
Model
Moto-Mower

The Moto-Mower is available in other models than shown here. Ask for special catalogue.

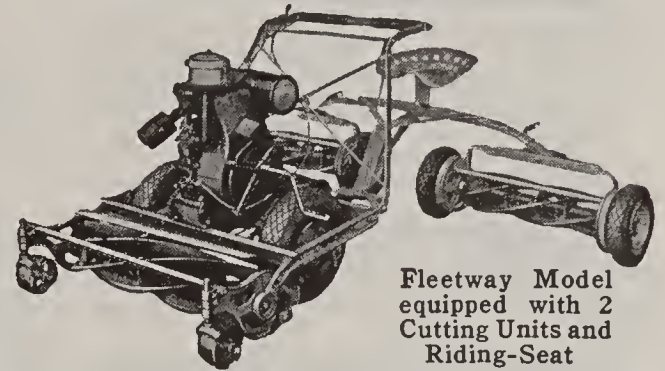
Power Lawn-Mowers

*The Test of Time Proves
Moto-Mower Leadership*

The Fleetway Model Moto-Mower

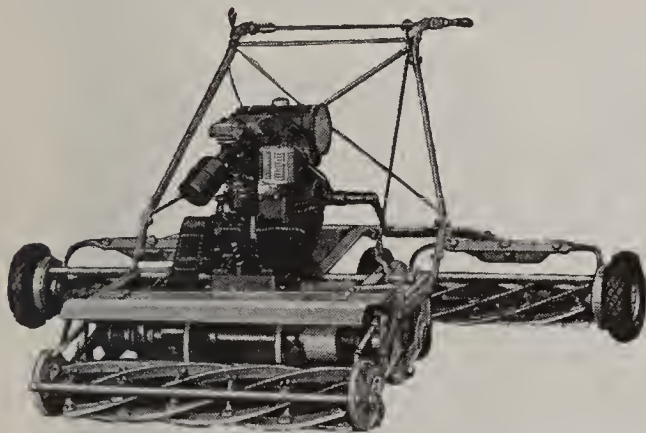
In the new Fleetway 32-inch Model Moto-Mower we have succeeded in retaining the superior outstanding features of our Wheel Mowers, and, in addition, incorporated the desirable features of a Roller Mower—trimming around formal plantings or along driveways, with the reel extending over edge of lawn. Equipped with 2 horsepower 4-cycle engine. Price, with Pneumatic Tires, \$380.

This model can be furnished with two 20-inch high-speed cutting units equipped with pneumatic tires and riding-seat, and with this equipment cuts a 62-inch swath. It is an ideal outfit for small golf clubs, athletic grounds, parks, estates, and extensive lawn areas where large tractor-driven equipment is not practical. The frame which joins the two units, and which may be instantly connected or disconnected from the main unit, is so constructed as to permit the Mowers to accommodate themselves to the uneven contour of the ground, and the hitch is so designed as to prevent bobbing of the cutting units.



Fleetway Model
equipped with 2
Cutting Units and
Riding-Seat

Lawn-Master Model Moto-Mower



Lawn-Master Model equipped with Trailer Units

The Lawn-Master is particularly recommended for estates with fine lawns which require trimming of turf along driveways. It is ideal for mowing garden paths and trimming around shrubbery and flower-beds, as the Mower may be operated as a trimmer with the cutting reel extended over the edges of depressions. Also a desirable Mower for bowling-greens, tennis-courts, golf-tees, and approaches to greens. The traction rollers are rubber covered. Cutting unit has neither side wheels nor front casters, and thus avoids streaking of the lawns. Price, 30-in. cut, \$365.

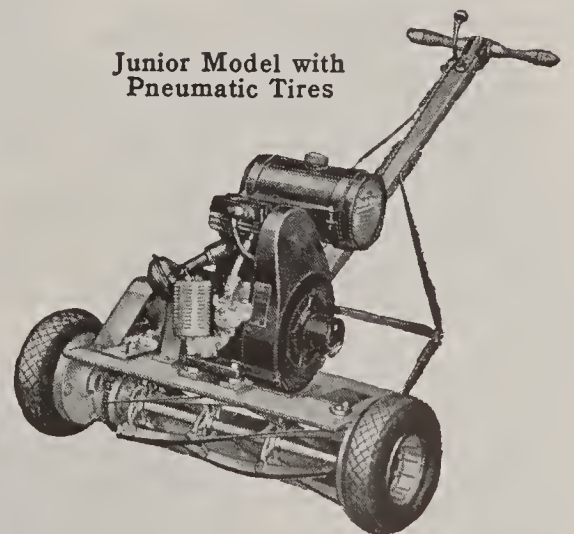
Can be equipped with two 20-inch cut, 7-blade Trailer Cutting Units, with Pneumatic Tires at an additional price.

Junior Model Moto-Mower

YOU'LL NEVER return to hand-mowing once you walk behind a Junior Model Moto-Mower 19-inch cut. Power lawn-mowing is effortless and efficient, and the Junior Model is such a durable machine that low maintenance expense adds pleasure to the ease of MOTO-MOWING. Automatic engine control, light weight, and low cost make the JUNIOR physically and financially easy to handle. Price, 19-inch cut, with slip-on rubber tires, \$115; 21-inch cut with pneumatic tires, \$145.

The Junior Model is also available with Pneumatic Tires in 19-inch cut and 21-inch cut.

Junior Model with
Pneumatic Tires



Moto-Boy
Model
Moto-Mower

Moto-Boy

The Moto-Boy is a reliable and well-designed Power Mower for the small-home owner at a price never before thought possible for a quality Power Mower. It is powered with a dependable 4-cycle air-cooled motor, has Hyatt roller bearings in wheels, and ball-bearings in cutting reel. The cutting unit has five crucible steel blades with a cutting width of 17 inches. Price, \$81.

Boston Garden Hose



Bull Dog Cord Hose. A super-strong, super-flexible Hose—the finest Lawn Hose made. Meets the requirements of golf courses, large estates, parks, greenhouses, etc. Brown corrugated cover. Double-braided, high-quality, cotton-cord carcass. A strong, flexible Hose that will give years of service. Furnished in $\frac{5}{8}$ -in., $\frac{3}{4}$ -in. and 1-inch sizes.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$4.75; 50-ft. length, \$9.25. Coupled.

Furnished in continuous lengths, $\frac{5}{8}$ -in. diam., 17 cts. per ft.; $\frac{3}{4}$ -in., 20 cts. per ft.; 1-in., 25 cts. per ft.



Vigilant Garden Hose. The most popular two-ply Garden Hose made. Heavy moulded construction throughout. Will stand lots of use and give years of service. Green corrugated cover.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$3.50; 50-ft. length, \$6.75. Coupled.



Vixen Garden Hose. An ideal Hose for the average home-garden or lawn. Heavy single-ply construction. From the standpoint of service it is fully equal to many of the lighter grades of two-ply Hose. Red corrugated cover.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$3; 50-ft. length, \$5.75. Coupled.



Tiger Garden Hose. For those who want quality at a low price. Has brown corrugated cover and heavy, single-braided cotton cord carcass.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$2.25; 50-ft. length, \$4.25. Coupled.

Boston Spray Hose

Made specially for spraying purposes.

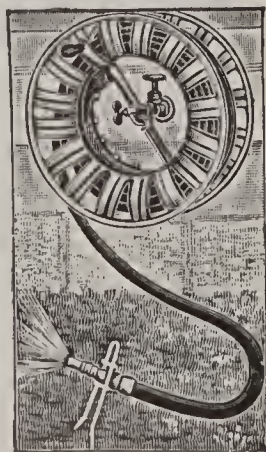
Non-Kink. Best quality 3-braid construction. Will stand 600 pounds working pressure. Any desired length. $\frac{1}{2}$ -in. diam., 25 cts. per ft.

Milo. Two-braid construction. Will stand 200 pounds working pressure. $\frac{1}{2}$ -in. diam., 12 cts. per ft.

Vigo. Single-braid construction. For 100 pounds working pressure. $\frac{3}{8}$ -in. diam., 10 cts. per ft.

Detachable Hose Reel

A most convenient and practical device. The axle of the Reel fits into a special faucet which is permanently attached to the water-pipe. The Reel revolves on the faucet, allowing the hose to be pulled out as desired. When the sprinkling is finished, the hose can be reeled up readily without any handling. Diameter, 20 inches; width, $8\frac{1}{2}$ inches; will hold 100 feet of $\frac{5}{8}$ -inch hose. Price, including faucet, \$4.50.



Rain King Nozzle



Made of solid brass, chrome plated. Precision tooled for greater accuracy. Will not stick or leak. No. N1. 50 cts. each, postage 10 cts. extra.

Flaring Rose Sprinkler

Especially adapted for sprinkling flowers, seed-beds, and new-made grass-plots. Made of brass and nickel plated.

Price 60 cts., postage 10 cts. extra.



Crown Fountain Sprinkler

Throws a beautiful mist-like spray up to 30 feet in diameter. Made entirely of heavy-gauge brass. Price 90 cts., postage 10 cts. extra.

Half-Circle Sprinkler

Same as Crown Sprinkler, but throws the water in a half circle. Price 65 cts., postage 10 cts. extra.

Greenhouse Sprays

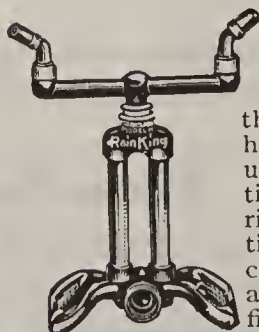
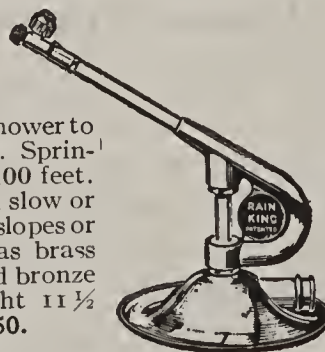
Used principally for watering in the greenhouse and hotbeds.

No. 268. Made of cast brass. Equipped with one fine and one coarse plate. Diameter of face 4 inches. \$2.

No. 3604. Stamped from heavy sheet brass. Diameter of face 4 inches. 50 cts., postage 10 cts. extra.

Model G Rain King Sprinkler

An entirely new type home Lawn Sprinkler that throws every known kind of spray from misty shower to soaking downpour. Sprinkles circles 12 to 100 feet. Can be set to turn slow or fast; can't stall on slopes or in high winds. Has brass arm and nozzle and bronze bearings. Height $11\frac{1}{2}$ inches. Price \$3.50.



Model D Rain King Sprinkler

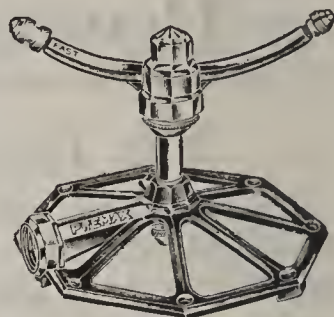
Similar to Model H in design. Uprights, arms and nozzles are polished brass. Patented nozzles are easily adjusted for any desired spray. Price \$2.25.

Model H Rain King Sprinkler

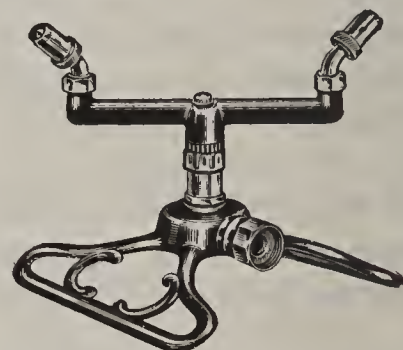
A substantial Sprinkler that is very popular with home-owners. Can be used as whirling or stationary Sprinkler. Uprights, nozzles, and fittings made of solid brass, chromium plated. Can be adjusted from coarse to fine spray. Price \$2.95.

Premax Floating Head Sprinkler

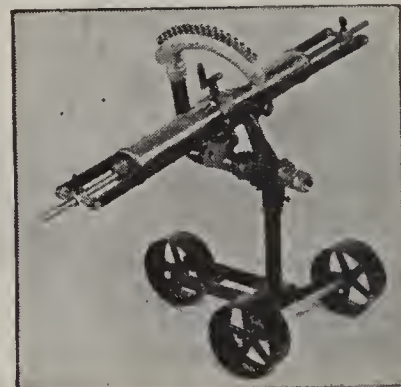
Constructed of rustproof white brass; nozzles, spindle, and bushings are of solid brass; exposed parts nickel plated. So designed that it is entirely without metal-to-metal bearings. Guaranteed a lifetime. Price \$2.25.



Parkside Lawn Sprinkler

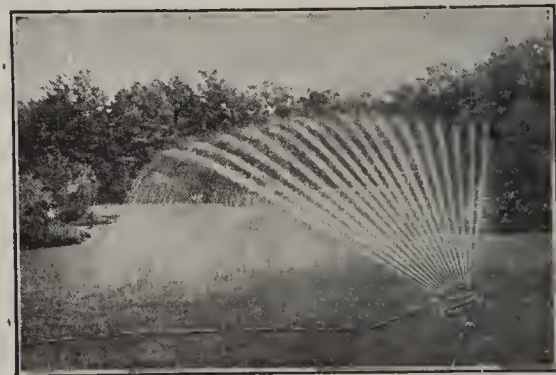


Nozzles can be adjusted for a fine mist or coarse stream, and to cover a large circle or small area. Will operate on high or low pressure. Price \$2.65.



White Showers Rainbow Sprinkler

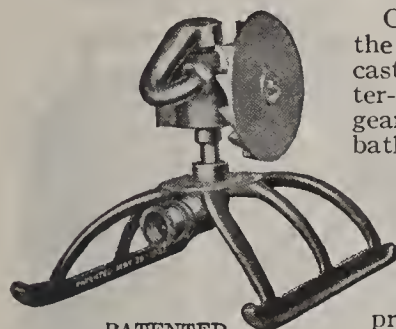
So designed that it sprinkles in a square instead of circle. The Rainbow has 17 nozzles, mounted on an oscillator and waters an area as large as 50 feet square, but it can quickly be adjusted for smaller areas and also for watering narrow strips and borders. It requires only six gallons of water per minute. A high-grade, durably built Sprinkler. Weight 25 lbs. Price \$40.



The Waterfan Lawn Sprinkler

A portable, oscillating lawn and garden Sprinkler. Operated by a turbine motor. Built of brass and phosphor bronze. Covers an area 40 by 45 feet. Works best on 25-pound water-pressure, but will work on higher or lower pressure. Price \$15.

Double Rotary Sprinkler



**PATENTED
Heavy-Duty Model**

Constructed of the best material; cast aluminum water-wheel; bronze gears that run in a bath of oil; adjustable nozzle, sprinkles a circular area of from 15 to 80 feet in diameter. Water-pressure causes the wheel to revolve, cutting the water into rain-like drops. Will give years of wear. Ideal for homes, golf courses, parks, gardens, and large estates.

Heavy-Duty Model. \$12.50 postpaid.

Junior Model. Built on much the same principle as the Heavy-Duty Model, but designed especially for the home-owner. Price \$7.50 postpaid.

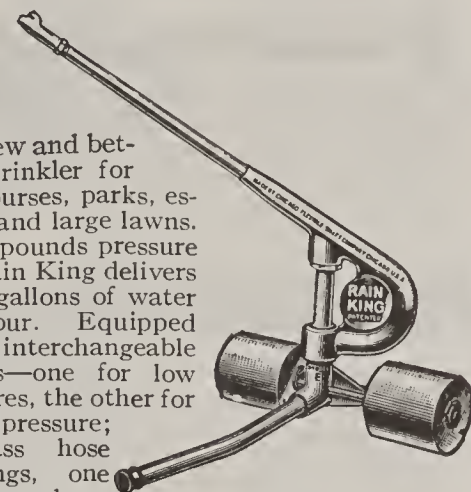
The "Lark" Sprinkler



**For Golf Greens
and Fairways,
Parks and Large
Estates**

The "Lark" sprinkles evenly a circular area from 60 to 150 feet in diameter, depending upon pressure and size of nozzle used. The far-throwing main stream revolves slowly and may be broken into coarse or fine drops as desired. The whirling Rotor gives even distribution in the center. Length of roller base, 18 inches. Two nozzles furnished with each Sprinkler. Fitted with 1-inch and 3/4-inch hose-connection. Price \$13.50.

Model E Rain King Sprinkler



A new and better Sprinkler for golf courses, parks, estates, and large lawns. At 50 pounds pressure the Rain King delivers 1,450 gallons of water per hour. Equipped with 2 interchangeable nozzles—one for low pressures, the other for higher pressure; 2 brass hose couplings, one 3/4-inch and one 1-inch, and steel roller base. Can be set to turn at any speed. Price \$17.50.

Turn on the Rain When You Need It!



WHITE SHOWERS Automatic Irrigation not only saves your crops from drought, but it produces better and more uniform quality, increases the yield, and gives earlier maturity. We handle a complete line of this money-making equipment and can take care of your every need. You cannot afford to be without it. Thousands of users say irrigation is the most profitable investment any grower can make. The cost of an installation is surprisingly low. Estimate gladly given on request.

**Don't Risk
Losing Your Crops
Another Season!**

Dunham Water-Weight Lawn Roller

Drum made water-tight of heavy steel plates. Weight is easily increased by addition of water or sand. Has rounded edges that will not mar turf. Bronze plug prevents rusting.

Nos. 5, 7, and 9 have roller bearings and handle brace as shown in cut.

Nos. 2, 4 and 6 have plain bearings without arched brace between handles.



	Diameter	Width	Weight empty	Weight filled with water	Price
No. 2.	14 in.	24 in.	60 lbs.	175 lbs.	\$10 25
No. 4.	18 in.	24 in.	82 lbs.	265 lbs.	12 25
No. 6.	24 in.	24 in.	105 lbs.	420 lbs.	16 50
No. 5.	18 in.	24 in.	85 lbs.	265 lbs.	15 75
No. 7.	24 in.	24 in.	110 lbs.	420 lbs.	19 25
No. 9.	24 in.	32 in.	130 lbs.	565 lbs.	21 75

Prices on Horse- and Tractor-drawn Rollers, also Fairway Rollers, quoted on request

Spike Disc Lawn and Green Cultivator

For Soil Aeration and Retention of Seed and Moisture in Turf

Lawns, putting-greens and fairways, parks, etc., require cultivation if their condition is to be maintained and improved. This can be done at moderate expense with the Spike Disc Cultivator. The high carbon alloy steel saw teeth cultivate and aerate



in one operation, eliminating hard baked surfaces and forming a mulch so necessary for the retention of moisture. The Spike Disc Cultivator should be used frequently.

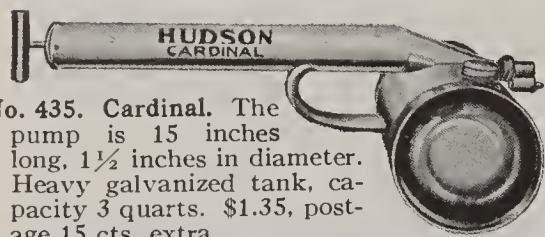
No. 30. Rolling width, 18 inches. Has 19 discs, each 10 in. diameter. \$27 50

No. 32. Same as No. 30 but with two handles for two-man operation. 30 00

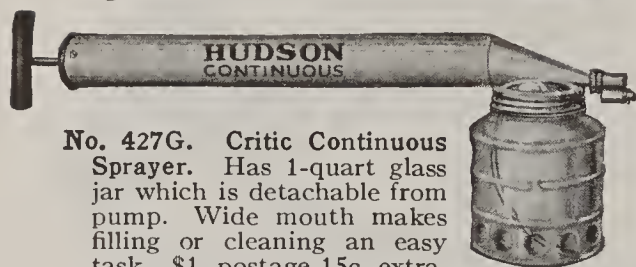
No. 22. For home lawns. Rolling width, 10 inches. Has 11 discs, each 10 in. diameter. 15 00

No. 25. Rolling width, 14 inches. Has 15 10-in.-diam. discs. 19 20
Circular and prices of Horse- and Tractor-drawn outfits on request

Hudson Hand Sprayers

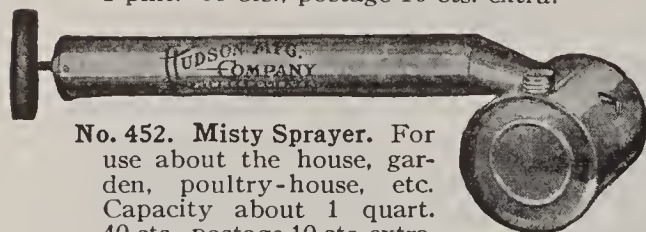


No. 435. Cardinal. The pump is 15 inches long, 1½ inches in diameter. Heavy galvanized tank, capacity 3 quarts. \$1.35, postage 15 cts. extra.



No. 427G. Critic Continuous Sprayer. Has 1-quart glass jar which is detachable from pump. Wide mouth makes filling or cleaning an easy task. \$1, postage 15c. extra.

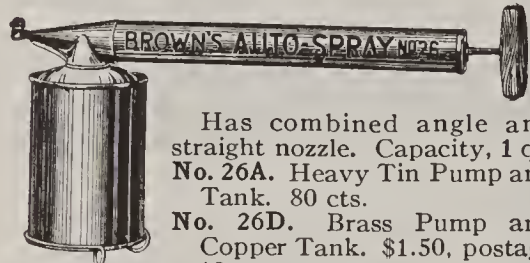
No. F10. Continuous. Meets the demand for a small continuous Sprayer for household use. Well made with large pump. Capacity 1 pint. 60 cts., postage 10 cts. extra.



No. 452. Misty Sprayer. For use about the house, garden, poultry-house, etc. Capacity about 1 quart. 40 cts., postage 10 cts. extra.

No. 222. Vapor Sprayer. A small Sprayer for general purposes in and about the house. 25 cts., postage 10 cts. extra.

Brown's Continuous Sprayer



Has combined angle and straight nozzle. Capacity, 1 qt. **No. 26A.** Heavy Tin Pump and Tank. 80 cts.

No. 26D. Brass Pump and Copper Tank. \$1.50, postage 10 cts. extra.



The Streamline Bomber Sprayer

A new idea in a handy, well-balanced, compressed-air Sprayer. Sprays all kinds of insecticides and is ideal for use in the garden, household, barn, or poultry-house. Has seamless brass pump, solid copper 2-quart tank, and patented shut-off nozzle. \$3.50.



Spra-Bulb

A rubber bulb sprinkler for spraying plants inside and outside the house. Ideal for sprinkling fresh vegetables displayed on produce stands, moistening laundry, and dusting powder on plants and animals. Spray head removable for instant filling.

B. 9-oz. capacity, 60 cts.
C. 14-oz. capacity, \$1.

The Myers Compressed-Air Sprayer



The Myers Compressed-Air Sprayer meets all demands for this style of Sprayer. The tank is made of heavy galvanized iron or brass. The side wall is close riveted and soldered. The top and bottom are made of extra-heavy material. Has 1¾-inch brass tube air pump. Equipped with 24-inch length of hose, 18-inch brass extension and adjustable brass nozzle to spray at any desired angle.

The concave top forms an 8-inch funnel which permits easy filling. The removable discharge tube and hose connection permit thorough drainage and cleaning of the tank.

No. 2240. 2½-gal. Galvanized Tank...\$5 00
No. 2240B. 2½-gal. Brass Tank... 8 95
No. 2242. 4-gal. Galvanized Tank... 5 95
No. 2242B. 4-gal. Brass Tank... 9 95

Brown's Open-hed Compressed-Air Sprayer



A powerful, durable, general-purpose Sprayer for spraying insecticides and disinfectants.

The tank opening is 5 inches in diameter, which permits easy filling and cleaning and is guaranteed for 100-pound pressure.

The pump is made of seamless brass 2 inches in diameter, and is 14 inches long. Plunger has double rubber-grip handle so that both hands can be used for pumping.

No. 4D. 4-gal. Galvanized Tank...\$6 50
No. 4B. 4-gal. Copper-alloy Tank... 9 90

Furnished with 20-in. length of Hose, 24-in. Brass Extension, and Swivel Nozzle.

No. 3D. 3-gal. Galvanized Tank... 5 65
No. 3B. 3-gal. Copper-alloy Tank... 8 90

Furnished with 20-in. length of Hose, 18-in. Brass Extension, and Brass Nozzle.

Insect-O-Gun

Kill Insects with Your Garden Hose

Attached to your garden hose, it ejects a penetrating wide-angle "fan" spray, reaching every insect in its path with telling results. Can be used with any insecticide requiring water solution. Built of non-rusting metal and will last a life-time.

Model A. Delivers 3 gallons of spray with each filling of pint jar. \$3.75.

Model B. Delivers 6 gallons of spray with each filling of quart jar. \$4.75.

Model C. Delivers 8 gallons of spray with each filling of quart jar. Designed for trees and high foliage. \$6.



Hudson Perfection Sprayer

A high-pressure machine for all types of spraying jobs. Made with either copper or galvanized tank. Has funnel attached for easy filling. Brass pump screws into top, permitting entire assembly to be removed at one operation. All seams riveted and heavily soldered. Equipped with 27 inches of 5-ply hose, adjustable brass nozzle for spraying at any desired angle, automatic shut-off, and 24-inch brass extension rod. Capacity 4 gallons.

No. 110GF. Galvanized Tank...\$5 90
No. 110BF. Copper Tank... 8 95



Hudson Junior Sprayer

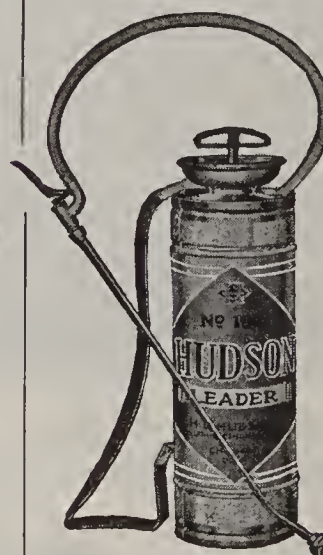
A high-grade compressed-air Sprayer. Made with either copper or galvanized tank. All seams are riveted and heavily soldered. Top and cap are brass. Has funnel attached for easy filling. Pump is a seamless brass tube. Equipped with 24 inches of 5-ply hose, 12-inch brass extension rod, brass nozzle, and automatic shut-off. Capacity 2½ gallons.

No. 140GF. Galvanized Tank...\$4 50
No. 140BF. Copper Tank... 7 00

Hudson Leader Sprayer

Designed to meet the demand for a Sprayer at a very favorable price. Capacity approximately 3½ gallons. First-quality materials and high-grade workmanship throughout, but with the frills omitted for the sake of economy. A very efficient machine. Has funnel attached for easy filling.

No. 192GF. Galvanized Tank. \$2.95.



Hudson Thrifty Sprayer

A moderately priced Sprayer for the home, back-yard garden, poultry-house, etc. Handles all liquids. Convenient size for a woman or child to use. Capacity 2¼ gallons.

No. 120GF. Galvanized Tank...\$2 80
No. 120BF. Copper Tank... 5 00



National Eezy Wear Garden Gloves

Have every feature you want in a Garden Glove: All-leather; dirtproof; durable; soft; comfortable; washable. Easy on the hands and easy to wear. Sizes for Women (Small, Medium, Large); for Men (Medium, Large). 75 cts. per pair, postpaid.

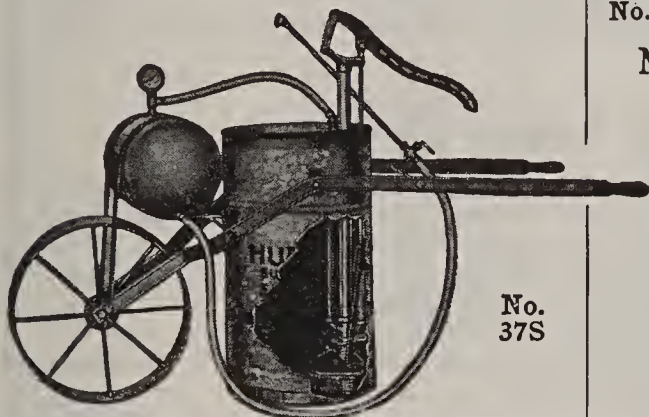
Platz Vermors Brass Sprayer

COMPACT—DURABLE—EFFICIENT



A compact and very efficient knapsack outfit, fitting the back snugly, with a strap over each shoulder. The pump will develop 40-pound pressure and is maintained with little effort until emptied. The pressure chamber is made from a solid piece of brass. The nozzle is adjustable with a cleaner attachment, and is equipped with fine, medium, and coarse spray caps, and a nozzle capable of throwing a straight stream for a distance of 40 feet. The diaphragm and two check-valves, the only working parts of the pump, are accessible, easy to replace, and inexpensive. Capacity approximately 4 gallons. Weight 16 pounds. \$20.

Hudson Sunshine Sprayer



No. 37S

This outfit is adapted for spraying small orchards, vineyards, truck gardens, in the greenhouse, and a very convenient and efficient rig for whitewashing and disinfecting poultry-houses and dairy-barns. It can be used on hillsides and uneven ground without danger of tipping. Heavy galvanized tank, capacity 12½ gallons. Equipped with 5 feet of ¾-inch 5-ply hose, 2-foot pipe extension, angle spray nozzle and pressure gauge. No. 37S. With air-pressure tank. . . \$21 95
No. 36S. Without air-pressure tank. . 12 50



Fig. 1284

Sure-Grip Hose Couplings

Made of brass. For use with power sprayers. ¾-in. or ½-in. Fig. 1284. Complete 60 cts.; female half 40 cts.



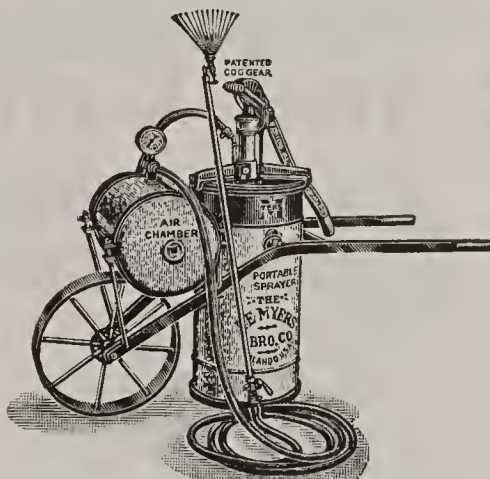
Sure-Grip Hose Clamps

Grips the hose coupling. Can't slip off. Fig. 2616. 25 cts.

Hose-to-Pipe Connection

Made of brass. Has ¼-in. pipe-thread. For ¾- or ½-in. hose. 35 cts.

The Myers Portable Sprayer



No. R339½B

A handy outfit suitable for spraying trees, whitewashing, painting, etc. The tank is made of extra-heavy galvanized iron, reinforced at top and bottom by steel bands, and hung in the frame on trunnions. The pump is securely attached to the tank by means of a clamp connected direct to the channel iron that surrounds the top of the tank held in position by one thumb-screw. Pump is fitted with dasher agitator. The handle can be located at any point desired.

Equipped with 15 feet of ½-in. hose, 8-foot extension, and Vermorel nozzle. Capacity 12½ gallons.
No. R339½B. With air-chamber. . . \$40 00
No. R336½B. Without air-chamber. . 25 00

Myers Cog Gear Spray Pump

Double Acting



This is our most popular Barrel Spray Pump, and is recommended to those who require a Sprayer of exceptional capacity and durability. A constant high pressure can be maintained with little or no exertion, and one man can operate this pump without fatigue.

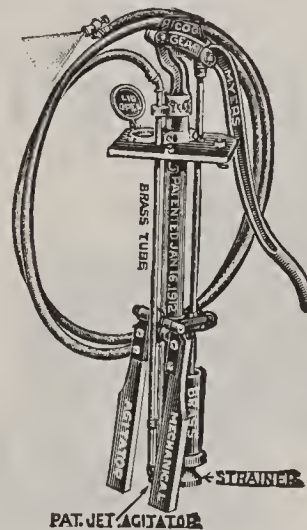
With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp-packed plunger, double lever shut-off discharge.

Adapted for spraying under heavy pressure. Will fit in an ordinary farm wagon box. No. R316B. Pump complete, 50-gallon barrel mounted on skids, with pressure gauge, 15-foot lead of ¾-inch 7-ply discharge hose, nozzle, 8-foot pipe extension, lever shut-off and mechanical agitator. \$54.

Y Connection

For 2 leads of hose. Made of brass. For ¾-in. pipe inlet. \$1.10.

Myers Barrel Spray Pump

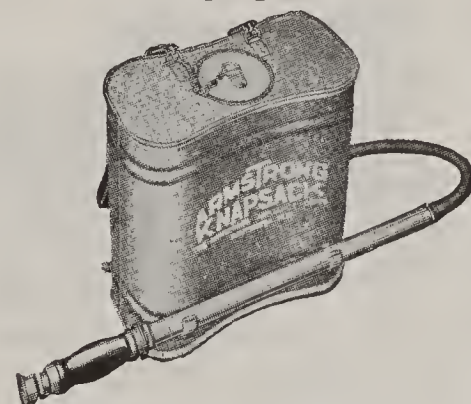


The Myers Barrel Spray Pump is designed to meet the requirements where a good Pump at a moderate price is desired. It is a thoroughly serviceable Pump, well made, simple in construction, and is recommended to the farmer with an ordinary sized orchard. Has bronze ball valves and brass seats.

No. R318B. Myers Cog Gear Barrel Spray Pump, with one lead of

15 feet of ½-inch 5-ply discharge hose, graduating Vermorel nozzle, and mechanical agitator, without barrel, \$16.

Armstrong Spray Pump



The Armstrong is a very simple and powerful Sprayer and is ideal for spraying liquid insecticides of all kinds.

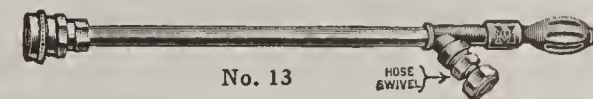
Will produce sprays of varying fineness—from a mist to a straight stream that carries 60 feet. Tall trees may be sprayed from the ground.

For spraying truck crops, such as potatoes, the knapsack and curved extension are used with the Pump. The Spray Pump is made entirely of brass.

Armstrong Spray Pump. \$4 50
Galvanized knapsack. Capacity 5 gals. . 5 00
Curved extension. 19 inches long. . . . 75

Myers Power Spray Guns

Designed for use with any power spray pump.



No. 13

No. 13. Will discharge a long-distance spray by means of which the top of the highest fruit tree can be reached, or it can be instantly changed to a very broad spray or shut off entirely. Hose swivel removes all twists in the hose. \$7.50.

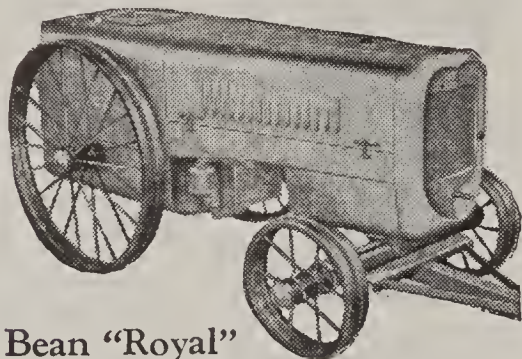
Myers Triple and Quadruple Power Spray Guns produce a fine fog spray with long distance drive and assure complete coverage of both sides of all leaves and blossoms, using the minimum amount of spray mixture. The nozzle-head, rod, and handle are made of aluminum alloy. The hose swivel removes all twists in the hose.

No. 36 Triple Spray Gun. Complete \$9.75.
No. 48 Quadruple Spray Gun. Complete \$11.

We have a full line of fittings and accessories for Sprayers, also repair parts for all of the Sprayers shown in this catalogue.

Bean Fruit and Crop Sprayers

FOR ORCHARDS



Bean "Royal"
Armored Sprayer

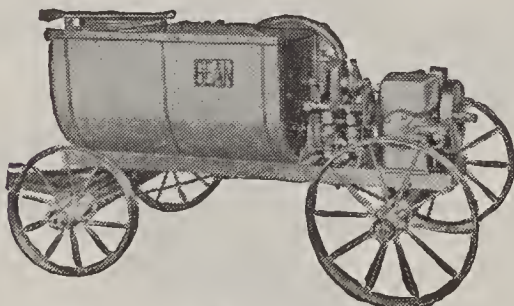
A SPRAYER FOR EVERY PURPOSE

In making the decision as to what Sprayer you will buy, the most important consideration is not what the Sprayer consists of, but what it will do for you in giving you efficient protection. You need Sprayers that will reach every part of the tree or crop to be sprayed, at sufficient pressure to guarantee perfect results.

No one has ever questioned the efficiency of Bean Sprayers. This year the Bean line offers any size, any type of Sprayer that you may need at prices in proportion to the work to be done.

Bean also manufactures Fruit Washers, Fruit Wipers, Fruit Cleaners, Potato Cleaners, and Potato Graders.

SMALL ORCHARD SPRAYER

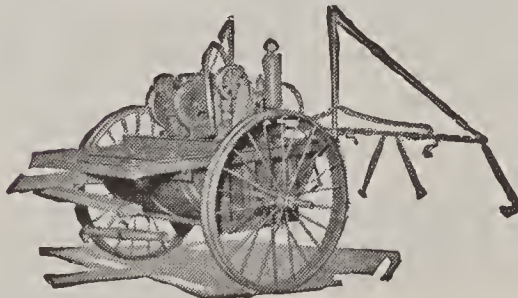


Bean Little Giant Duplex
Sprayer, Outfit 3206

Bean "Royal" Armored Sprayer

An outstanding all-purpose Sprayer for orchard work. It is made of steel throughout, with leakless steel tank proofed against corrosion and fully enclosed. Low construction allows the outfit to go under tree branches, short wheel-base for easier hauling and shorter turning, and countless other improvements that offer the greatest Sprayer value of a lifetime. Built for continuous operation at pressures of 600 to 700 pounds. Powered with famous 4-cylinder Hercules engine. A Sprayer you will be proud to own and use. Available in several sizes and types. Catalogue and prices on request.

CROP AND ORCHARD
COMBINATION SPRAYER



Bean General Purpose
Sprayer, Outfit 3208-P

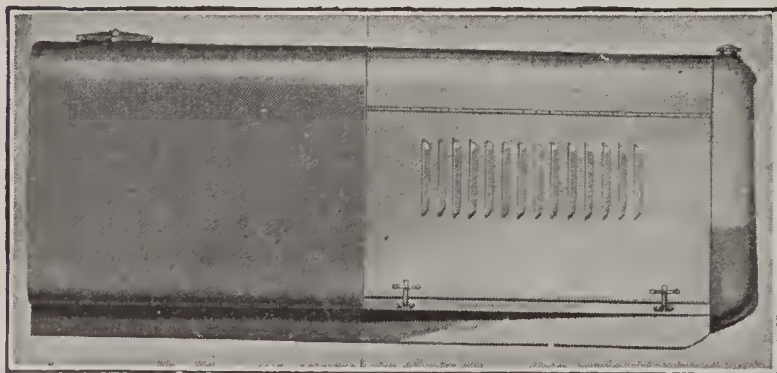
Bean Little Giant Duplex

Many growers have a limited number of acres of fruit, yet high-grade, clean fruit means just as much to them as it does to the commercial grower with large orchards, therefore they try to give their trees the best of care. You will not be handicapped in your work as you have been in the past because this Little Giant Duplex Sprayer gives you real high pressure and efficient spraying at an investment that is in proportion to the amount of orchard to be cared for. You can now get the results you desire in efficiency, capacity, and economy at a reasonable first cost. Price without hose and guns, \$312 f.o.b. factory.

Bean General Purpose Sprayer

Growers with average acreage of potatoes or other crops desire a medium-capacity, medium-priced, yet efficient Sprayer for their work. Outfit 3208-P, as shown at left, represents exceptional value in every respect. In the first place, it has capacity for 4-row boom and it has pressure for efficient spraying. The 4-row (3 nozzles to the row) boom works at a pressure of 250 to 300 pounds, and for orchard work with the hose and gun it maintains 300 pounds pressure easily. It has special, strong, rigid frame construction, large wheels for easy draft, and it is very close to the ground, yet allows ample clearance for row crops. Price without hose and guns, \$394 f.o.b. factory.

TRUCK MOUNTED SPRAYER



For Orchard or Crops

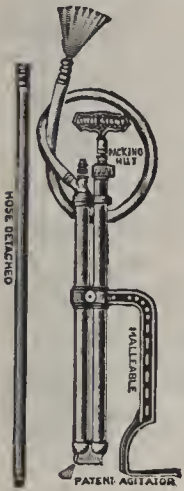
Bean Motor Truck Sprayer

In a great many cases it is desirable to use a motor truck for hauling the Sprayer. Bean Motor Truck Sprayers are designed especially for this purpose and can be used either for orchard or crop work. They are engine-driven in themselves and furnish capacity the same as our other royal models. For potato spraying the boom is mounted on the front of the truck so as to eliminate hauling the extra Sprayer through the potatoes. Catalogue and prices on request.

BEAN SPRAYERS ARE BUILT IN MANY TYPES AND WITH MANY PUMP AND TANK CAPACITIES. COMPLETE CATALOGUE AND PRICES GLADLY SENT ON REQUEST.

Spraying and White-washing Machines

Myers Little Giant Sprayer



This Spray Pump is constructed entirely of brass. It is so arranged that the labor of pumping is all done on the downward stroke of the piston and nothing on the up. The effect of this operation while pumping is to hold the pump down. The foot-rest steadies the pump, holding it in position.

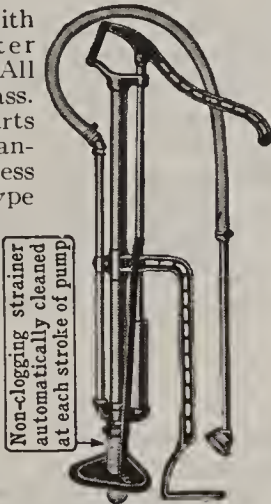
It is provided with a large air-chamber. The nozzle throws a continuous spray and is not affected by the movement of the plunger. Will throw a solid stream 50 feet.

No. 327 1/2. Complete with hose and Imperial combination fine- and coarse-spray and solid-stream nozzle, \$3.75. Whitewash Nozzle, extra \$1.

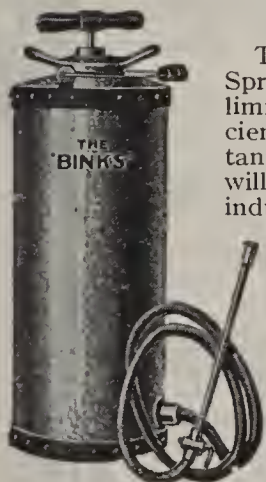
Hudson Moro Spray Pump

Designed for use with whitewash, cold-water paints, and insecticides. All working parts are brass. Valves and nozzle parts easily accessible for cleaning. Cylinder of seamless brass tubing. Dasher-type agitator which operates on each stroke of pump and keeps material in solution and thoroughly cleans strainer screen.

No. 126SA. Complete with 3 feet of 3/4-inch spray hose and 12-inch extension rod. \$6.40.



Non-clogging strainer automatically cleaned at each stroke of pump



Style H

Binks, Style H

The applications for this Sprayer are almost unlimited. It will spray efficiently whitewash, disinfectants, and insecticides, and will be found invaluable for industrial plants, dairy barns, poultry-houses, etc.

Tank is of extra-heavy, galvanized steel and holds 5 gallons. Furnished complete with 10-foot, 3/8-inch discharge hose, spray pipe, shut-off valve, and nozzle ready for work. \$14.25.

Hudson Electric Paint Sprayer

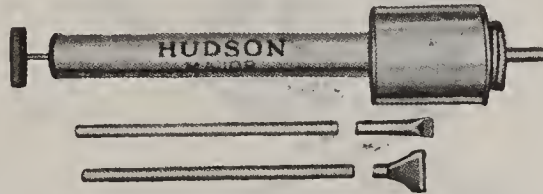
A very efficient Sprayer for applying paints, lacquers, enamels, house paints, and similar preparations. Can also be used for insecticides and disinfectants. Has two nozzles: one produces a cone-type spray, the other a flat fan-shaped spray. Nozzle adjustment produces any desired density from a heavy, wet spray to a fine floating vapor. Regularly furnished with pint glass jar. Special thumb operated shut-off valve permits instant control.

Has 1/10 H.P., 110-120 volt, A.C. or D.C. Motor equipped with 10 feet of rubber insulated cord, carrying strap and carrying handle. No. 305. \$17.75.



Hudson Signal Duster

A favorite for dusting about the home against roaches, ants, flies, mosquitoes, etc. No. 660. 30 cts., postage 10 cts. extra.



Hudson Major Duster

Handles all kinds of dry dust very efficiently. It is used in the home-garden, on truck-plots, around poultry-houses, etc.

Furnished with two 12-inch, heavy tin extensions and two tips, one a narrow-angle tip, the other a broad-angle tip. No. 665. 80 cts., postage 15 cts. extra.

Hudson Adjutant Duster

Similar to Hudson Major Duster except has smaller reservoir and furnished with only one 12-inch Extension Tube. No. 664. 60 cts., postage 10 cts. extra.

Hudson Patrol Duster



A well-made glass-jar Duster with standard Mason jar thread. The contents are always visible. Gives an even distribution of dust and will do anything a Duster should do. Equipped with two 12-inch Extension Pipes and two Angle Nozzles. No. 612. \$1.15, postage 15 cts. extra.



Brown's Crystal Duster

This Duster is especially good for use in dusting orchards, garden truck, field-crops, and poultry-houses, and is especially recommended for use with Cyanogas. Has 1-quart durable glass jar. Pump cylinder 18 in. long. Length overall, 40 in. \$1.25, postage 15 cts. extra.

Woodason's Insect Powder Bellows



Just the thing for dusting insecticides in houses and gardens. Particularly adapted for eradicating bedbugs and roaches. Being strong, it blows the powder well behind the woodwork and into the cracks where the insects breed. It is exceptionally well made of high-grade materials. Small size \$3; large size \$4.75. Postage 25 cts. extra.

The Root Hand Gun



Large Opening

Feed Lever can be adjusted from nothing to 20 pounds per acre

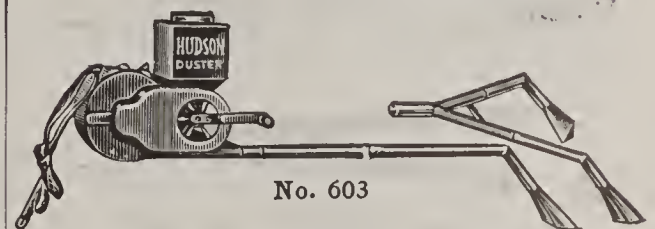
Clamping Ring

Fan Shaft runs on Ball Bearings

Rubber Nozzle Turns to any position swings up or down for any height of plant. Can't dent or break Will not corrode.

The ideal Dust Gun for dusting all kinds of agricultural dusts where the acreage is not large enough to justify the use of traction or power dusters. The gears are bronze and run on ball-bearings packed in grease. Duster is perfectly balanced, easy to carry and operate, and weighs only 12 pounds with hopper empty. Has a powerful fan-blast which thoroughly breaks up the dust and distributes it evenly and uniformly. Can be operated with discharge tube in front or to the rear of the operator. The hopper has a capacity of 7 to 10 pounds of material. Built to stand hard knocks and rough usage. \$16.50 as illustrated. With 12-in. flexible Y (2 outlets) \$19.50.

Hudson Crank Dusters



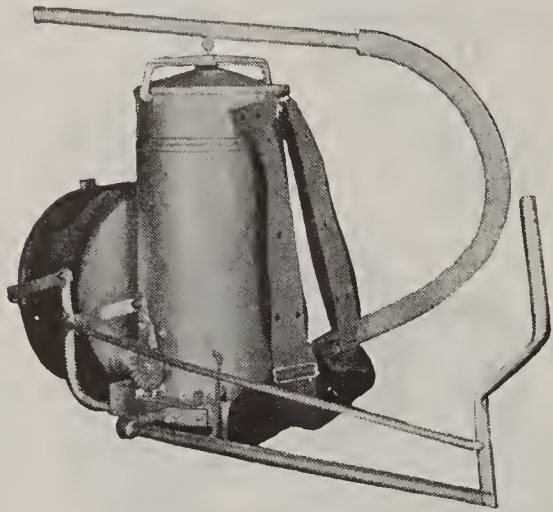
No. 603

No. 603. Designed to give the maximum value at a minimum cost. Handles all dusting materials very efficiently. Sturdily built, with all working parts mounted on a heavy bar frame. Machine-cut gears, semi-enclosed, and brass pinions, insure easy operation. Four-blade, high-speed fan runs in bronze bearings. Powder reservoir holds better than three quarts. Discharge equipment consists of three 14-inch tubes, two elbows, one Y, two nozzles, and adjustable carrying-strap. Weight 10 lbs. \$8.

No. 608. Of heavier construction and larger capacity. Intended for growers who have moderate to large acreages to dust. \$12.50.

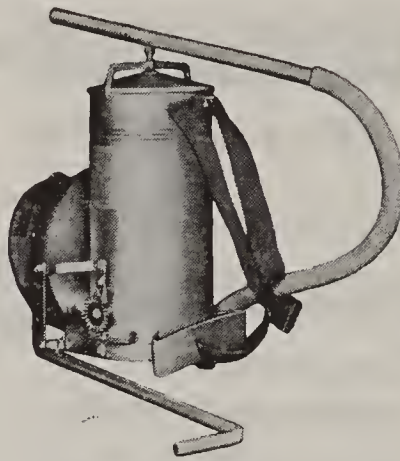
Traction or Power Dusters

If you are interested in a larger Duster, please write for special catalogue and prices.



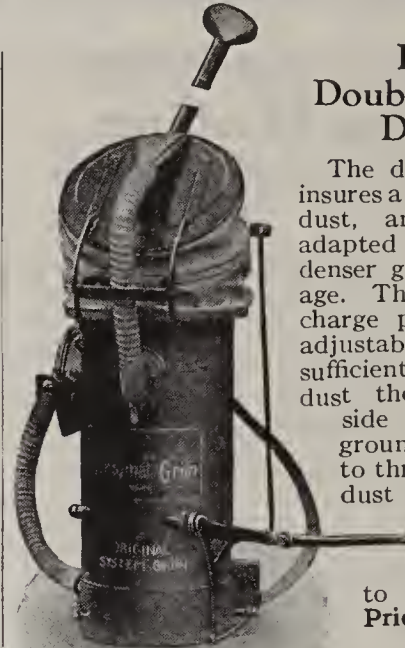
American Beauty Duster

Suitable for row crops or orchards. Will dust trees up to 25 feet in height. Weight 16 pounds. Holds 15 pounds of dust. Price \$20.



California Beauty Duster

The very Duster for truck crops, such as potatoes, peas, beans, cabbage, etc. There are no rapidly revolving parts to give trouble. Weight 11 pounds. Holds 12 pounds of dust. Price \$14.



Platz Double-Action Duster

The double bellows insures a steady flow of dust, and is better adapted for dusting a denser growth of foliage. The 44-inch discharge pipe, with its adjustable spreader, is sufficiently long to dust the underneath side close to the ground, as well as to throw a cloud of dust 20 feet in the air. Weight 17 pounds. Capacity 20 to 30 pounds. Price \$22.



No. 1-RJ

Bartlett Tree Trimmers

No. 1-RJ Compound Lever Type. Built for heavy work and will cut a limb up to 1 1/4 inches in diameter. Rod connects the knife lever along one side of the pole to the handle lever on the opposite side, which allows the rod to cross the pole and results in half of the strain on each side of the pole, giving about double strength. This is a jointed pole pruner and has several advantages over a solid pole type of pruner. Sections are joined by means of brass sleeves making the tool perfectly rigid. 8-ft., 2 sections, \$6.50; 12-ft., 3 sections, \$7.25; 16-ft., 4 sections, \$8, postpaid.

No. 1-W Pulley Type. Furnished with jointed pole. Has rope-operated cutting head. Each section is 4 feet long and equipped with brass sleeve body on one end and brass ferrule on opposite end. As many of the lower sections can be used as desired. An ideal pruner for use near high-tension power lines. 4-foot top section \$7; extra 4-foot sections, each \$3, postpaid.

No. 44 Bartlett Pole Saw

Intended for use where the limbs are larger than the capacity of the No. 1-RJ or No. 1-W. The saw blade is 16 inches long and securely held by the head, which is stamped from cold rolled steel and fastened to the pole by three bolts. The blade can be adjusted to three angles to suit the operator's position. 4-ft. Jointed Pole Saw with brass ferrule attached, \$4.10; 4-ft. sections, each \$3. 8-ft. Solid Pole Saw, \$4.40; 10-ft. Solid Pole Saw, \$4.70; 12-ft. Solid Pole Saw, \$5.

Clyde Tree Trimmer

No. 5407. Blade and hook are made from the best tool steel, firmly riveted to selected basswood handle. The blade is held open by means of a coil spring from the lever handle to the pole. A well-made Trimmer at a low price. 8-ft., \$2; 10-ft., \$2.25; 12-ft., \$2.45; 14-ft., \$2.65.



No. 44

No. 5407



Porter HKP. Forester

Patented slide shift gives amazing multiplication of cutting pressure. No strain on tool or operator. Cuts close up, two sharp cutting blades.

- No. 1. For average pruning. 20-in. . . . \$5 00
- No. 2. For general farm and orchard work. 27-in. 6 00
- No. 3. For brush clearing and heavy pruning. 34-in. 7 00

Porter HKP. Pointcut Pruner

The blades are so designed that suckers are cut on the point with minimum handle opening and limbs up to 1 1/4 inches in diameter with full handle opening. It is in reality two tools in one.

- No. 4. 20-in. \$5 00
- No. 6. 27-in. 5 20



Tiffany "Hammer-Forged" Pruner

Forged from special steel and tempered to stand the strain and hold a keen edge. Put together with a heavy rivet under tremendous pressure, no nuts to work loose.

No. 777 Bartlett Tree Pruner

A Pruner designed on scientific principles and built to stand up to the work. The blade positively will not cut or dig into the hook. Both blade and hook are hardened drop forged crucible tool steel. Handles white ash, 26 inches long. \$3.85.

Clyde Hand Pruner

An excellent tool for an occasional job and where a professional Pruner is not required. Blade and hook hammer forged from carbon steel, hardened and tempered. Ash handles securely held to head by two rivets. \$1.25.

FOR TREE PAINT, SEE
PAGE 72



No. 777



No. D-127 Disston's Pruning Saw

A 10-inch section at point of blade is made 6 points to inch; rest of blade has "lumberman" teeth. The fine teeth are for starting cut. Blade 26 inches long. \$4.35.



No. 7 Disston's Pruning Saw

An old stand-by. Designed for general pruning. Blade of Disston steel, taper ground; cross-cut teeth, 8 points to the inch. Hardwood handle, open grip; three brass screws. Blade 18 inches long. \$1.35.



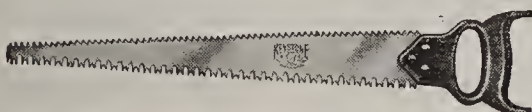
No. 32 Disston's Pruning Saw

Just the tool for foresters and orchardists. Steel blade 20 inches long, 5 inches wide at butt, 1 inch wide at point. Champion teeth. Hornless handle of beechwood. Dowel pin through grip gives unusual strength to the handle. 20-inch blade, \$2.40; 24-inch blade, \$2.85.



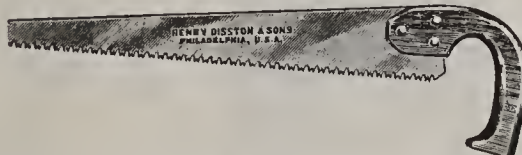
No. D27 Disston's Pruning Saw

Designed for the professional. Steel blade 26 inches long, 6 inches wide at butt, 1 1/4 inches wide at point; 6 points to the inch. Cuts on both draw and push stroke, either dry or green wood. \$4.



No. K40 Disston's Keystone Pruning Saw

Steel blade with double straight-edge; one edge, 8 point cross-cut teeth and other edge "lumberman" teeth. Blade secured to hardwood handle with three rivets. 16-inch \$1; 18-inch \$1.10; 20-inch \$1.20.



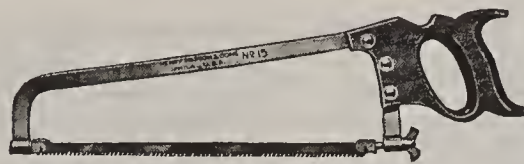
No. 14 Disston's Pruning Saw

Has "Champion" teeth which cut unusually fast on both draw and push stroke. Blade 22 in. long, 3 1/4 in. wide at butt, 1 1/4 in. at point. Large, open-grip handle. \$1.90.



No. 138 Disston's Pruning Saw

Folding handle makes it convenient to carry in pocket. Stainless steel blade, 12 inches long; 8 point needle teeth. Cuts on draw stroke. \$2.



No. 15 Disston's Pruning Saw

Steel blade 14 inches from center to center of hole, 1 inch wide, 8 points to the inch; adjustable; cuts on both draw and push stroke; swivel on both ends; wing-nut tightener. \$2.

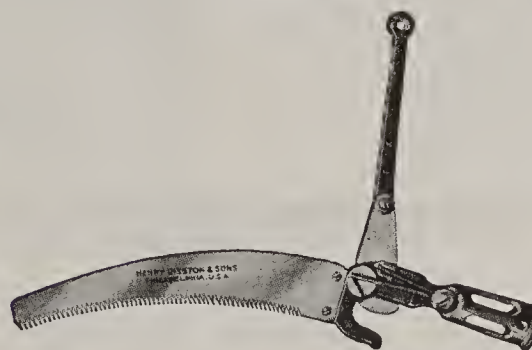


Disston's No. 166 Pruning Saw

A good, strong, practical tool with 14-inch crescent-shaped steel blade; 1 1/2 inches wide at handle; teeth on concave edge to cut on draw stroke; 8 points to the inch. \$1.15.

No. 168. Similar to No. 166 but cuts on both draw and forward stroke. \$1.30.

No. 55 Orchard Pruning Saw and Shear



A combination tool—saw and shear. The curved blade makes it easy to engage and to saw the higher branches of a tree when using a pole. The blade of the saw is 9 1/2 inches on cutting edge.

Shear frame and socket is made of malleable iron. Blade shaped to cut with a shearing motion. The hook will take a 3/4-inch or smaller limb. Shear blade is 4 inches long with 1 1/2-inch cutting edge. Spring returns knife to open position. Price, without pole, \$3.25.

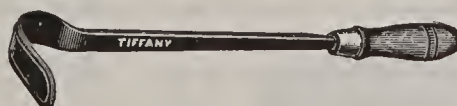
No. 114 Pruning Saw. Same as No. 55 except blade is 14 inches long and without shear. \$2.25.

Pruning Poles. Made of basswood, 12 feet long. \$1.35.



Tiffany Grafting Tool

Forged from one piece of fine crucible steel. It makes clean splits and does not tear the bark or split the stub too far. Length 8 inches. \$1 postpaid.



Tiffany Improved Tree Scraper

A handy tool for removing loose bark that harbors insects. Made of thin forged spring steel. Length 12 inches. \$1 postpaid.

Pruning Shears



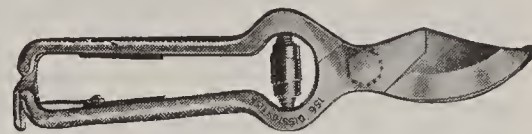
Disston's No. 116. Malleable iron with blade of high carbon steel, hardened and tempered. Thread and lock-nut tension adjustment. 9-inch. 75 cts.



Disston's No. 146. Solid drop forged tool steel. Blade hardened, tempered, ground and polished. Thread and lock-nut tension adjustment. 9-inch. \$1.



Disston's No. 136. Drop forged tool steel with detachable, high carbon tool-steel blade; hardened, tempered, ground and polished. 9-inch. \$1.25.



Disston's No. 156. Drop forged high carbon steel with double riveted, detachable blade of alloy steel; hardened, tempered, finely ground and highly polished. Has patented tension adjustment. 8 1/2-inch. \$3.



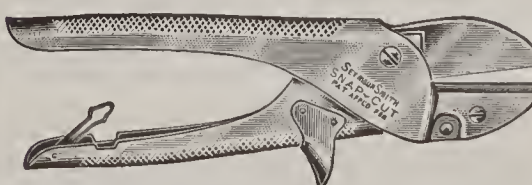
Boker's No. 550. Polished oval Rieser pattern hand-forged high carbon blade and hook. Volute spring. Lock nut and bolt. 9-inch. \$1.



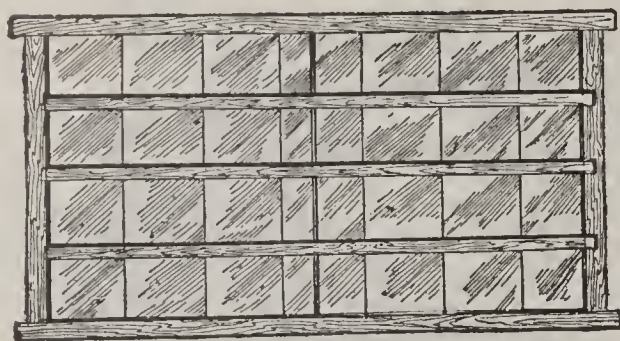
Genuine French Shears. Forged tool steel blade. Drop forged handles. Wheel-spring type which insures easy, positive action. 9-inch, \$2.75; 11-inch, \$3.75.



Henckels' Double-Cut Pruner. Made especially for rugged work. Forged steel blades. Very handy for cutting roots and tubers. No. 192. 8 1/2-inch. \$5.



Snap-Cut Pruner. The special hardened tool steel blade cuts onto a soft metal anvil with a powerful drawing or slicing action that cuts a 3/4-inch branch with surprising ease. Makes a perfect clean cut on large or small branches. All-steel construction. No. 119. 7 3/4-inch. \$2.



Metropolitan Hotbed Sash

Metropolitan Hotbed Sash are made from select quality air-dried Tidewater Gulf cypress, fabricated and finished on specially designed sash-making machines. All parts are mortised and tenoned to insure accurate, smooth, and tight-fitting joints. The sides are planed perfectly straight to prevent any open space between sash when laid on the frame. They are strictly a quality product.

No. 13. 3 ft. 2 in. x 7 ft. for 4 rows of 8-in. glass.....\$4 25

No. 18. 4 ft. x 6 ft. for 5 rows of 8-in. glass.....4 45

Above sash $1\frac{3}{4}$ inches thick with round iron cross bar in center and with horns.

No. 8. 3 ft. 2 in. x 6 ft. for 4 rows of 8-in. glass.....\$2 90

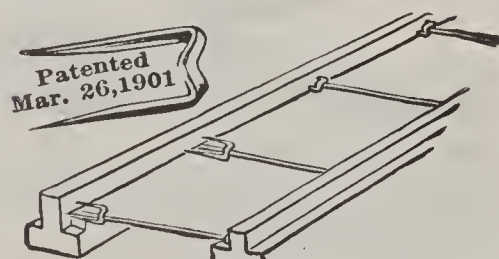
Above $1\frac{3}{8}$ inches thick, with horns and wood cross-bar.

All Sash are unpainted and without glass at prices quoted. 5-sash lots, 15 cts. per sash less; 10-sash lots, 30 cts. per sash less. Special prices on larger quantities or other sizes of sash quoted on request.

Glass for Hotbed Sash

We carry in stock Lustra Glass, also Pennvernon Glass, both flat drawn and made by a new process.

Per box
6 x 8, 150 lights, B, Single Strength. \$5 10
8 x 10, 90 lights, B, Single Strength. 4 70
10 x 12, 60 lights, B, Single Strength. 4 70
8 x 10, 90 lights, A, Single Strength. 5 30
10 boxes and upward, 25 cts. per box less than above prices



Peerless Glazing Points

(Improved Van Reyper)

Used by all practical florists and market-gardeners for glazing hotbed sash. No. 1. For small, single-thick glass. No. 2. For large, single-thick glass. No. 2½. For double-thick glass. All sizes, 75 cts. per 1,000, postpaid.
Zinc City Greenhouse Points. Made from pure zinc. 5/8-in. or 7/8-in., 1-lb. pkg. 65 cts.
Star Brand Triangle Glaziers Points. Zinc coated. No. 00 size, 1/2-lb. pkg. 20 cts.

Mastica Glazing Compound

Mastica is elastic and tenacious. In a few hours after use, a skin or film is formed, preventing the evaporation of the oils and leaving it pliable for years. One gallon will cover about 290 running feet, one side. Quart can 85 cts., postpaid \$1. Gallon can \$2.65, postpaid \$2.90.

Mastica Glazing Machine. For applying Mastica. \$3.25, postpaid \$3.50.

Densoplastic (Glazing Putty)

A scientifically formulated permanent, elastic, exceptional adhesive glazing Putty for glazing, reglazing, and repairing of hotbed sash and greenhouses. Can readily be removed with a putty knife, thus permitting the easy replacement of broken panes. COVERAGE: 300 lineal feet of bar per gal., with 3/8-in. nozzle.

Natural Color

1-gal. can.....	\$2 65
5-gal. pail.....	12 75
20-gal. drum.....	44 00
30-gal. drum.....	64 50
55-gal. drum.....	115 50

Black Color

5-gal. pail.....	\$9 50
20-gal. drum.....	32 00
30-gal. drum.....	46 50
55-gal. drum.....	82 50
Glazing Gun.....	4 00

Glazing Gun free with 55-gal. drums.

Denso-White (White Paint)

An exceptional white paint especially formulated to the proper consistency for cutting in around sash, making it particularly adaptable for the painting of hotbed sash and greenhouses. COVERAGE: 400 square feet per gallon, one coat.

1-gal. can.....	\$3 25
5-gal. pail.....	14 25
30-gal. drum.....	82 50
55-gal. drum.....	148 50



Hotbed Thermometer

No. 5981. Registers from 20° to 240° F. Length over all, 15½ inches. \$3, postpaid.

Red Devil Glass Cutters

No. 024. Single wheel.....	\$0 20
No. 48. Bronze turret controlling six wheels.....	35

Hydrofluoric Acid

Used for cleaning hotbed and greenhouse glass.

1 lb. in wax container.....	\$1 25
10 lbs. in lead jug.....	8 50
115 lbs. in lead carboy.....	35 00
Allowance for lead jug, \$3.50, and lead carboy, \$15, when returned.	

Putty Bulb

A simple and useful device for applying putty or glazing compound to sash. \$1.50.

Rubber Bands

Made from pure crepe rubber. For bunching vegetables. No. 10 ($1\frac{1}{4} \times \frac{1}{8}$ in.) or No. 12 ($1\frac{3}{4} \times \frac{1}{8}$ in.) in 1-lb. boxes, 65 cts. per lb.; 10-lb. lots, 60 cts. per lb.; 25-lb. lots, 55 cts. per lb.

McKim Patent All-Steel Measures

Guaranteed U. S. Government Standard Capacity



	Each	Ppd.
1 qt.....	\$0 25	\$0 30
2 qts....	30	35
4 qts....	35	45
8 qts....	45	55
16 qts....	70	80
Per set (5 measures)	\$1.75;	postpaid
	\$1.95.	

Felins Bunch Tyer

Bunch Vegetables, Cut-Flowers, and Small Nursery Stock can be tied ten times quicker.

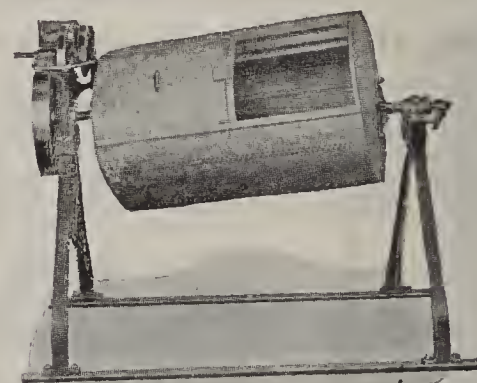


Foot Power

used in the shed or field.
Foot-power Model.....\$65 00
Electric Model.....140 00

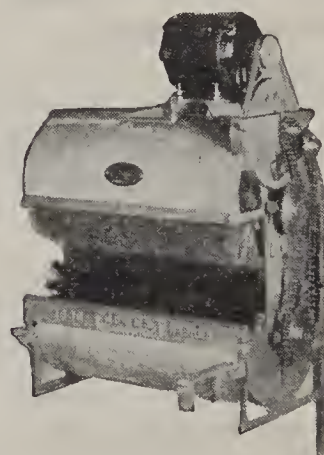
Quicker bunching means quicker sales and greater profits. These machines prove their value to the market-gardener, florist, and nurseryman from the start. Old methods of tying—systems which required hand-operation and consumed the growers' costliest possession, time—can now be dispensed with. The foot-power model can be

Felins Electric Root Washer



A practical and durable Root Washer saves time; economical to operate and rinses as it washes. Slow motion of drum prevents damage to roots. Capacity of drum, 5 bushels. Will wash up to 60 bushels an hour. Has ¼ H.P., 110-volt, AC motor. Price \$150.

Torrent Bunch Vegetable Washer



Clean
Vegetables
Bring
Better
Prices

The Torrent Bunch Vegetable Washer is a very practical device for washing bunch vegetables. Does the job thoroughly and quickly. Washes upward of 150 dozen bunches an hour. Has ¼ H.P., 110-volt, AC motor. Price \$125.

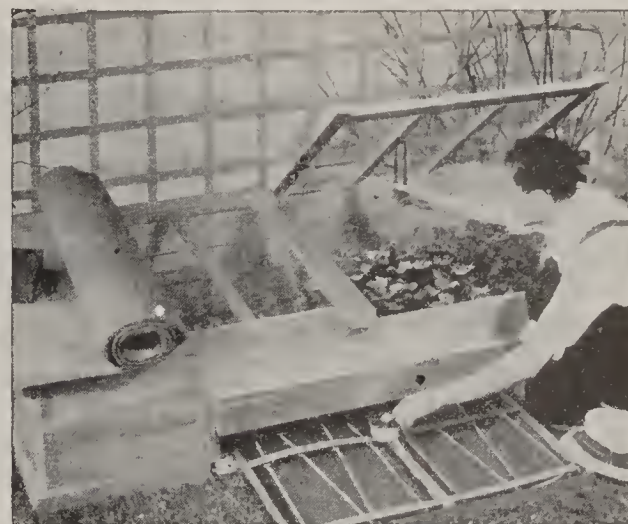
BOOKS

Practical Vegetable Culture. By Albert E. Wilkinson. 308 pages; 135 illustrations. \$2.

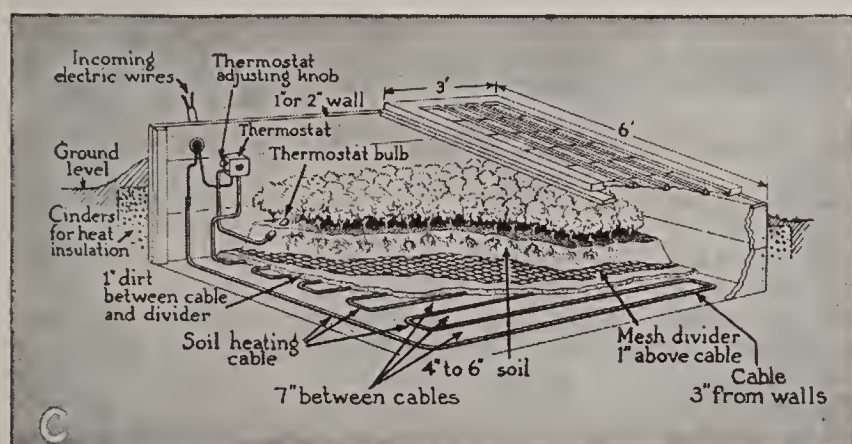
Plant Propagation. By Alfred C. Hottes. 238 pages; 136 illustrations. Cloth, \$2.

Westinghouse Automatic Hotbed Heater

Quicken plant-growth with controlled electric heat. Westinghouse Automatic Hotbed Heater provides the right amount of heat for indoor or outdoor beds of any size between 9 square feet and approximately 25 square feet. Its Built-in Watchman Thermostat automatically maintains any desired temperature between 50° F. and 100° F. To adjust heat, merely turn a handy knob located on the thermostat. Cost of operation is low, its consumption averaging 1 to 2½ kilowatt-hours per day. Its frame is rustproofed; moisture will not affect it. Heating elements are of special long-lived construction. Ask for Circular 1954-A; it describes the Heater in detail and tells how to build a hotbed. Heater is 32 inches square. Assembled complete with thermostat and 5-foot rubber-covered cord, for 110 volts. Price, \$9.95.



General Electric Automatic Soil Heating



More than 10,000 commercial florists and gardeners are now using this advanced method which gives them positive control of plant-growth and, as a result, more plants, better plants, and the greater profits which are naturally obtained by having the plants ready for the highest-priced markets.

In greenhouse benches, hotbeds, coldframes, etc., any temperature from freezing to 95° F. can be selected and maintained to produce desired plant-development. Beds can be installed whenever convenient and put into operation merely by closing a switch. The first and the operating cost are very low.

Equipment consists of special lead-covered heating cable and adjustable temperature-regulating thermostat. Standard unit cable lengths are of 60 feet on 115 volts, and 120 feet on 230 volts, for each 36 and 72 square feet of bed respectively. Large beds can be equipped by connecting necessary number of units in parallel with thermostat to control from one to six units. Ask for publication GEA-1644C. Cable, 6¼ cts. per ft. Thermostat, \$9.



Germaco Hotkaps

Germaco Hotkaps can make many extra dollars for you this season. They are patented wax-paper cones—"individual hothouses for each plant" that completely cover them, and *fully protect* them from frost, wind, rain, ground-crusting, and insects. This is your assurance of earlier, bigger crops, and higher, early-to-market prices. Hotkaps are inexpensive and easy to use. One man "sets" over 3,000 per day. Circular and sample on request.

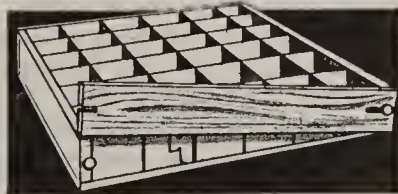
	Postpaid		Postpaid
25 Hotkaps...	\$0 50 \$0 60	1,000 Hotkaps...	\$9 75 \$10 10
100 Hotkaps...	2 40 2 55	5,000 Hotkaps...	48 25
250 Hotkaps...	3 65 3 85	10,000 Hotkaps...	95 50

Garden Setters, made of light metal, 50 cts. each.

Garden Setter and Tamper included at price quoted with 100 and 250 Hotkaps. Steel Setter, with Tamper, \$1.50 each.

B-B Garden Flats

Made of choice lumber. Has patent detachable front which permits plants to be removed without disturbing the roots. Suitable for starting any kind of seeds indoors. Can be used either with or without pots. Size 12¾ x 18¾ x 3 inches. Holds 54 2-inch pots or 24 3-inch pots. Price (without pots) 55 cts. each; 25 or more, 50 cts. each.



B-B Waterproofed Plant-Boxes

An economical Plant-Box for those who desire to have earlier and better flowers and vegetables. When plants are ready to set outdoors, simply unlock bottom, fold flaps back, and place plants in ground without disturbing roots. Consists of Plant-Box made of heavy cardboard and 12 folding Cardboard Pots. 15 cts. each, 2 for 25 cts., \$1.35 per doz., postpaid.



Neponset Flower Pots



Neponset Flower Pots are universally used by home growers of flowers and vegetables, by truck-gardeners, by florists, by every grower of plants on a small or large scale. They are light, durable, and inexpensive. When used for transplanting they can be handled quickly and the construction permits removing easily if desired. They are ideal for rooting or shipping vegetable and flowering plants of any description. They are made from a tough, lasting, and water-proof paper and will not break in shipment or handling.

	25	Postpaid	100	Postpaid	1,000
2¼-in.....	\$0 25	\$0 35	\$0 50	\$0 65	\$3 25
3-in.....	30	40	75	90	4 25
4-in.....	35	45	1 00	1 25	6 75

Miller's No-Fold Dirt Bands

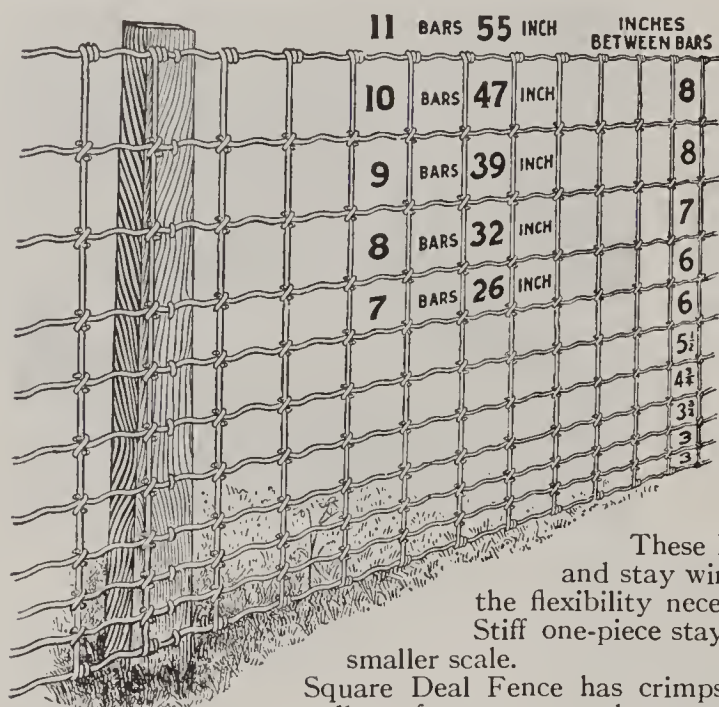
These Bands are used and recommended for transplanting purposes by experimental stations and large growers. They are time- and labor-savers. The plants need less watering, and when they are ready to set out, the Band can be planted with plant, preventing the disturbance of the roots. In using Bands you have stronger and healthier plants at the minimum cost. Especially adapted for early vegetable plants.

	250	Postpaid	500	Postpaid	1,000	Postpaid
2 x 2 x 2 in.....	\$0 60	\$0 70	\$0 90	\$1 05	\$1 50	\$1 70
3 x 3 x 3 in.....	1 00	1 15	1 65	1 85	3 00	3 30
4 x 4 x 3 in.....	1 30	1 45	2 15	2 35	3 75	4 05

Miller's Lock-Process Dirt Pots

Miller's Pots are made of high-grade water-finished board. Briefly, our Pots when locked stay locked; there is no occasion for the sides or bottoms of our Pots to become loose, and they contain no glue to loosen up or become sour.

	250	Postpaid	500	Postpaid	1,000	Postpaid
2 x 2 x 2 in.....	\$0 95	\$1 10	\$1 65	\$1 85	\$2 75	\$3 05
3 x 3 x 3 in.....	1 35	1 55	2 50	2 80	4 50	5 10
4 x 4 x 3½ in.....	1 85	2 10	3 50	3 90	6 50	7 25



Square Deal Red Brand Farm Fence

Square Deal is not just another Fence. It has become the world's most widely used Fence because it is **galvannealed**—not merely galvanized. "Galvannealing" is an extra process, performed in great heat-treating ovens at 1250° Fahrenheit, an extra process, protected by 12 United States patents, that leaves more zinc on the wire and fuses, or amalgamates, it right into the wire. The zinc coating is not just "laid on" the wire. Galvannealing assures a thick, even coating that offers years longer protection against the elements and rust—and at no extra cost.

Red Brand Fence proved itself "definitely superior to any competing Fence" in a scientifically conducted weather-test of 45 different makes and sizes of Fence from all leading manufacturers and mail-order houses.

The Square Deal Knot

These Knots give the strongest grip with the least amount of wire. Crimps in the line and stay wires fit together within the Knot. This absolutely prevents slipping, but allows the flexibility necessary to fit hills and hollows without buckling.

Stiff one-piece stay wires used in Square Deal Fence perform the same duties as posts, only on a smaller scale.

Square Deal Fence has crimps in the line wires that give it an elastic tension and keep it tight and trim, regardless of temperature changes.

No. 12½ Gauge Field Fence. Top and bottom wires No. 10 gauge, filler wires No. 12½ gauge.

	Height	Bars	Stays	Weight	Per rod
No. 832- 6-12½.	32 in.	8	6 in.	7.1 lbs.	\$0 36
No. 939-12-12½.	39 in.	9	12 in.	6.3 lbs.	30½
No. 1047-12-12½.	47 in.	10	12 in.	7.1 lbs.	34½
No. 1155-12-12½.	55 in.	11	12 in.	7.9 lbs.	38½

No. 11 Gauge Field Fence. Top and bottom wires No. 9 gauge, filler wires No. 11 gauge.

	Height	Bars	Stays	Weight	Per rod
No. 726-12-11.	26 in.	7	12 in.	7.0 lbs.	32½
*No. 832- 6-11.	32 in.	8	6 in.	10.3 lbs.	49½
*No. 832-12-11.	32 in.	8	12 in.	8.0 lbs.	37
*No. 939-12-11.	39 in.	9	12 in.	9.1 lbs.	41½
*No. 1047-12-11.	47 in.	10	12 in.	10.2 lbs.	46½
*No. 1155-12-11.	55 in.	11	12 in.	11.4 lbs.	52

No. 11 Gauge Sheep Fence. Same gauge wires as No. 11 Field Fence.

	Height	Bars	Stays	Weight	Per rod
*No. 635-12-11.	35 in.	6	12 in.	6.8 lbs.	31
No. 845-12-11.	45 in.	8	12 in.	8.7 lbs.	40

No. 9 Gauge Field Fence. All wires, including filler wires, No. 9 gauge.

	Height	Bars	Stays	Weight	Per rod
No. 726-12-9.	26 in.	7	12 in.	9.8 lbs.	\$0 43
*No. 832- 6-9.	32 in.	8	6 in.	15.1 lbs.	70
No. 832-12-9.	32 in.	8	12 in.	11.4 lbs.	50
*No. 1047-12-9.	47 in.	10	12 in.	14.8 lbs.	65
*No. 1155-12-9.	55 in.	11	12 in.	16.6 lbs.	73

No. 9 Gauge Sheep Fence. Same gauge wires as No. 9 Field Fence.

	Height	Bars	Stays	Weight	Per rod
*No. 635-12-9.	35 in.	6	12 in.	9.5 lbs.	41
No. 845-12-9.	45 in.	8	12 in.	12.5 lbs.	54½

The No. 635 Sheep Fence is spaced 6, 6, 7, 8, and 8 inches between bars and the No. 845 Sheep Fence 4¾, 5½, 6, 7, 8 and 8 inches between bars.

*These are popular styles and carried in stock at Pittsburgh. Other styles shipped direct from mill, prepaid at prices quoted.

Complete catalogue on request.

All styles put up in 20-rod rolls.

10-rod rolls, 25 cts. per roll, extra.

STAPLES. 1- or 1¼-inch. 6 cts. per lb.

American Self-Fastening Angle Steel Fence Posts

These have been designed for general farm use where a light-weight post is desired. They are easy to handle, easy to drive, strong and serviceable, and are rolled from specially selected steel. Of sturdy angle shape, they will stand up and render years of satisfactory service. Self-fastening feature eliminates clamps and staples. The tongues are well formed and conveniently placed 2 inches apart. Fence wire or wire fabric can be fastened securely just where you want it. They are 1¼ x 1¼ x 5/16 inches, painted a rich maroon color and equipped with patented slit-wing type of anchor.

	Weight each	Each	100 or more Each
5 ft.	6.20 lbs.	\$0 30	\$0 27
6 ft.	7.32 lbs.	35	32
6½ ft.	7.88 lbs.	38	35
7 ft.	8.44 lbs.	40	37
7½ ft.	9.00 lbs.	42	39
8 ft.	9.56 lbs.	45	42

Angle Steel End and Corner Posts

Made of 2½ x 2½ x ¼-inch angle with rounded corners. Designed to be set in concrete. End Posts have one brace; Corner Posts, two braces. They do not have the self-fastening feature.

	Weight	Each
End Posts. 7-foot; weight 52.5 lbs.	\$2 40	
7-foot, 8-inch; weight 57.0 lbs.	2 65	
Corner Posts. 7-foot; weight 84.0 lbs.	3 90	
7-foot, 8-inch; weight 89.0 lbs.	4 10	

Banner Steel Fence Posts

These Posts outlast three ordinary wood posts. No holes to dig—no setting—no tamping. Drive over 300 in a day.

Built like a railroad rail—the strongest form of fence-post construction known.

With their large split-wing patented anchor plates will root firmly into the ground as driven and hold the fence securely in line.

A continuous series of lugs are rolled along both sides of the face of the post and spaced every ¾ inch.

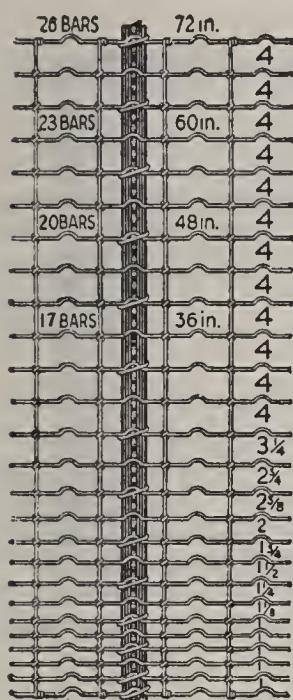
Banner Posts are finished with a heavy coat of a special steel paint with unusually high preservative qualities that is baked on under a high temperature.

Fence wire is fastened with special hump clamps which are easily attached. The clamps come formed to fit snugly around the post. Just place them in position and bend arm back over stem of post. An ordinary pair of pliers or a hammer will do the trick. Seven clamps furnished free with each post. No staples to buy.

	Weight each	Each	100 or more Each
5 ft.	7.32 lbs.	\$0 38	\$0 34
6 ft.	8.65 lbs.	44	40
6½ ft.	9.32 lbs.	47	43
7 ft.	9.98 lbs.	50	46
7½ ft.	10.65 lbs.	53	49
8 ft.	11.31 lbs.	56	52

SEE PAGE 94 FOR GALVANIZED POSTS





Square Deal Poultry and Garden Fence

Identified by the "Red Brand" marking with the top line painted red

This fencing will turn all poultry, including the smallest chicks; also keep out the small "varmints" that ravage the chicken-pens. The first five line wires at the bottom are only 1 inch apart.

Made by the patented "Galvanealed" process. The heavy-gauge wires assure many years of service.

The stiff picket-like stay wires are attached to the line wires with the famous Square Deal non-slip knot.

Square Deal Poultry Fence requires no top and bottom boards, and fewer line posts, to keep it erect and trim. Thus it costs, when erected, much less than poultry netting.

The top and bottom wires are No. 11 gauge with No. 14½ gauge filler wires. Stay wires 6 inches apart.

PRICES PER 165-FOOT ROLL

No. 1736-6-14½.	36 in. high, 17 bars.....	\$5 00
No. 2048-6-14½.	48 in. high, 20 bars.....	6 15
No. 2360-6-14½.	60 in. high, 23 bars.....	7 15
No. 2672-6-14½.	72 in. high, 26 bars.....	8 25

Blue Ribbon Poultry Fence

Made by the patented "Galvanealed" process, Blue Ribbon Fencing will last several times as long as ordinary poultry netting. The spacing of the horizontal wires is the same as Square Deal Poultry Fence described above and it has the famous Square Deal knot. The top and bottom wires are No. 15½ gauge and the filler wires are No. 17 gauge. The stay wires are spaced 4 inches apart.

PRICES PER 150-FOOT ROLL

No. 1736-4-17.	36 in. high, 17 bars.....	\$3 70
No. 2048-4-17.	48 in. high, 20 bars.....	4 30
No. 2360-4-17.	60 in. high, 23 bars.....	5 10
No. 2672-4-17.	72 in. high, 26 bars.....	5 75

Staples for the above, 8 cts. per lb.

Diamond Mesh Poultry Netting

Made from No. 20 gauge wire and galvanized after weaving
Put up in 50- and 150-foot rolls

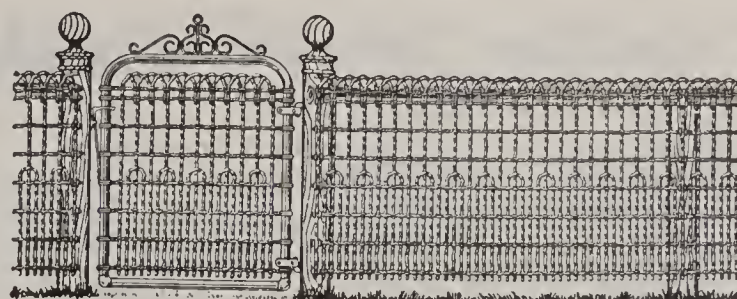
Height	2-inch mesh		1-inch mesh	
	50 ft.	150 ft.	50 ft.	150 ft.
1 foot.....	\$0 50	\$1 30	\$0 95	\$2 55
1½ feet.....		1 70		3 60
2 feet.....	85	2 15	1 75	4 70
2½ feet.....		2 60		5 85
3 feet.....	1 10	3 00	2 50	6 80
4 feet.....	1 45	3 85	3 10	8 75
5 feet.....	1 75	4 75		
6 feet.....	2 00	5 60		

Straight Line Poultry Netting

Line wires run parallel. Made from No. 20 gauge wire and galvanized after weaving. Put up in 150-foot rolls only. Same price as Diamond Mesh Poultry Netting.

Baby Chicks

For many years we have made a specialty of Baby Chicks and can furnish all popular breeds. Also White Pekin Ducklings and Bronze Baby Turkeys. Write for price-list.



Cyclone Lawn Fence

Makes beautiful home surroundings worth while

With Cyclone Fence enclosing your premises, you are more sure of success in your efforts to cultivate beautiful surroundings for your home. Flowers, lawns, gardens, trees, and shrubs have protection at all times against destructive outsiders. Cyclone Fence is woven in beautiful, symmetrical designs that are attractive and artistic, yet unobtrusive.

STYLE "F." The most popular ornamental fence for front yards, back yards or division fence. Pickets are of No. 9 heavy galvanized wire spaced 3 inches apart at top, 1¾ inches apart at the bottom. Cables spaced 6 inches apart, except the two top cables, which are spaced 2¾ inches apart. Illustration shows Style "F" Fencing and Cyclone Galvanized Walk Gate.

STYLE "L-EXTRA." A high-grade, moderately priced Fence. Specially adapted for back yards and division fencing. Pickets of No. 9 heavily galvanized wire are spaced 3 inches apart. Cables are of heavily galvanized wire spaced 6 inches apart, except the two top cables, which are spaced 2¾ inches apart.

PRICES PER 150-FOOT ROLL

Style "F."	36 in. high; per roll.....	\$18 25
Style "F."	42 in. high; per roll.....	20 25
Style "F."	48 in. high; per roll.....	23 35
Style "L-Extra."	36 in. high; per roll.....	13 35
Style "L-Extra."	42 in. high; per roll.....	15 00
Style "L-Extra."	48 in. high; per roll.....	16 75

PRICES IN CUT LENGTHS

Style "F" 42 in. will be furnished in any desired length under 150 feet at 17 cts. per lineal foot. Style "L-Extra" 42 in. at 12½ cts. per lineal foot.

Both styles of Cyclone Lawn Fence furnished either in woven or electric welded fabric.

Cyclone Galvanized Walk Gates

A handsome and practical Gate for all home purposes. The frame is heavy tubular steel, 1⅝-inch diameter, galvanized, and covered with Style "F" Fabric. Gates are made for 3-foot openings, which means distance between posts with proper allowance for hinges and latch. Prices: 36 in. high, \$3.10; 42 in. high, \$3.25; 48 in. high, \$3.40. Prices include fixtures for wood posts. Fixtures for tubular steel posts, \$1 extra. If steel-post fixtures are wanted, give outside diameter of posts.

Cyclone Flower-Bed Border

Extensively used for paths and walks. Easily installed and will conform to any size or shape of flower-bed.

Is ordinarily used without supports but can be erected on any wood or steel support. Height 22 inches. 150-foot roll \$10.25; cut lengths, 9 cts. per lineal foot.

Cyclone "L-Extra" Trellis

A very durable and artistic support for climbing vines and flowers; harmonizes with home surroundings. Made of corrugated No. 11 galvanized wire, spaced 4 inches apart; cables are of No. 13 galvanized wire.

	PRICES	
	150-foot rolls per roll	Cut lengths per lineal foot
18-inch width.....	\$10 75	\$0 09
24-inch width.....	12 50	10
30-inch width.....	14 00	11

American Galvanized Steel Fence Posts



"The Post Without a Fault"

The American Galvanized Post surpasses all others in Strength—Durability—Economy.

The cylindrical shape gives greater resistance at the ground line and makes it easier to drive the post. The Line Posts are a straight cylinder $1\frac{3}{4}$ inches in diameter made of $14\frac{1}{2}$ gauge metal. Tongues are placed $1\frac{1}{2}$ inches apart and may be bent up or down to hold fence wire. Posts are galvanized after being formed and punched, all parts being protected by galvanizing. Line Posts, when driven, open automatically, providing self-anchorage.

Twenty-five years of actual service is convincing proof of the lasting quality of the American Post. Nothing adds more to the appearance of a farm than fence stretched on neat, uniform, and slightly steel posts.

For woven-wire fence, barb wire, and plain wire.

Galvanized Line Posts

	Each
6-foot; weight 8.4 lbs.....	\$0 56
6½-foot; weight 9.1 lbs.....	61
7-foot; weight 9.8 lbs.....	65
7½-foot; weight 10.5 lbs.....	70
8-foot; weight 11.2 lbs.....	75

End and Corner Posts

Made of No. 8 gauge steel galvanized after forming. Top and bottom diameter $2\frac{1}{2}$ inches. The end or gate post has one brace, the corner post has two braces. Shipped complete with all fittings. Designed to be set in concrete.

	Each
End or Gate Posts. 7-foot; weight 48.3 lbs.....	\$3 00
7½-foot; weight 51.9 lbs.....	3 15
8-foot; weight 54.5 lbs.....	3 35
Corner Posts. 7-foot; weight 67.7 lbs.....	4 10
7½-foot; weight 72.7 lbs.....	4 40
8-foot; weight 75.9 lbs.....	4 75

All End and Corner Posts shipped direct from factory.

Extras

	Each
Ornamental Tops. For Line Posts.....	\$0 20
For End and Corner Posts	40
Driving Caps. For Line Posts.....	40

Royal Blue Wire Stretcher



The Royal Blue Wire Stretcher and Hoist has no equal of its kind in simplicity, etc. It is a first-class roller-bearing Stretcher having large sheaves, each revolving on ten hardened steel bearings. Made entirely of best grade of steel and malleable iron. Reeved with best quality of $\frac{3}{8}$ -inch rope, 16 feet to each Stretcher. Wire grasps are positive and hold the wire firmly. The new swiveling features at top and bottom are a great convenience when using as a hoist or handling "twisty wire." Can be used as a hoist up to 1,000 pounds capacity. \$1.80, postage 20 cts. extra.



National Single Wire Stretcher

Made of malleable iron. Grips firmly and easily hooks over any style of steel or wood post. It is just what you want for stretching barbed and plain wire. \$1, postage 15 cts. extra.



Special Barb Wire

Our Special Barb Wire is made of No. 14 galvanized, strong steel wire, and has a breaking strength of 1,000 pounds. The barbs are short and humane.

80-rod spool

Two-Point Cattle. Barbs about 5 inches apart.....\$2 15

Two-Point Hog. Barbs about 3 inches apart..... 2 25

Regular Barb Wire

Made from No. 12 galvanized wire. We can furnish in different styles as follows:

80-rod spool

Two-Point Cattle. Barbs about 5 inches apart.....\$2 80

Two-Point Hog. Barbs about 3 inches apart..... 3 00

Four-Point Cattle. Barbs about 5 inches apart..... 3 00

Four-Point Hog. Barbs about 3 inches apart..... 3 20

If preferred we can furnish above in even weight 100-pound spools at \$3.55 per 100 pounds.

Galvanized Plain Wire

100-lb. coil

No. 9. 1705 feet in 100-lb. coil. 10-lb. coil 65 cts.....\$4 05

No. 10. 2057 feet in 100-lb. coil..... 4 10

No. 11. 2582 feet in 100-lb. coil..... 4 15

No. 12. 3369 feet in 100-lb. coil. 10-lb. coil 65 cts..... 4 25

Galvanized Coil Spring Wire

No. 9. 1705 feet in 100-lb. coil. Price per 100 lbs. \$4.15.

Special prices will be quoted on any of the above Wire in ton or half-ton lots

Fence Staples

Galvanized. 1 or $1\frac{1}{4}$ -inch. Lb. 6 cts., 100-lb. keg \$3.95.

Polished. 1 or $1\frac{1}{4}$ -inch. 100-lb. keg \$3.70.

Wire Nails

100-lb. keg

20d Common Nails.....\$3 15

10d Common Nails..... 3 30

9d Common Nails..... 3 35

8d Common Nails..... 3 40

Prices on other sizes quoted on request. Prices subject to change without notice.

The Townsend Wire Stretcher



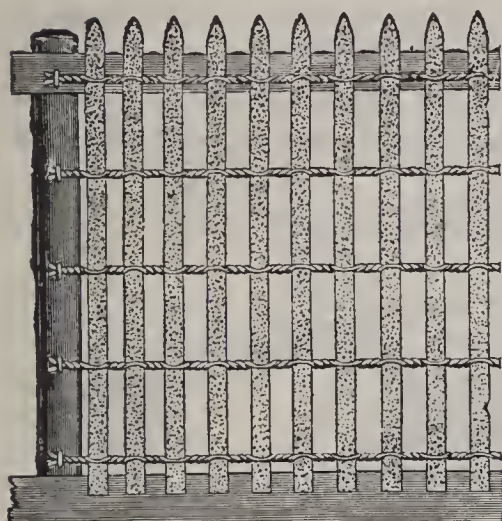
This is made with a wooden lever or handle 3 feet in length, to which is attached malleable iron pinchers, into which are riveted serrated steel grips; warranted not to slip. It is a substantial and very durable implement. It stretches large-meshed woven wire much better than most of the Stretchers which are made especially for this purpose, and it works equally well on plain, twisted, and barbed wire. For use on wood posts, \$1.90; for use on steel posts, \$2.



Champion Ash Sifter

Inexpensive and ideal for sifting ashes under any size furnace grate. Draft removes all dust—keeps basement clean—saves coal. Scoop $8\frac{1}{2}$ x 14 inches; all wire construction; 36-inch handle. \$1, postage 20 cts. extra.

Combination Picket Fence



This popular Fence, for gardens, yards, vacant lots, etc., is made of hard-wood pickets 1½ inches wide, ½ inch thick, and 4 feet long, woven together, 2 inches apart, with five cables of No. 12 heavy galvanized wire, pointed at top. Painted with a red mineral preservative, applied boiling hot which makes a very durable and attractive finish. Top rail and bottom board not necessary. Can also be used as a snow fence. Easily put up and taken down.

100-foot roll, 4 ft. high.....\$12 50
50-foot roll, 4 ft. high..... 6 75
Cut lengths 16 cts. per ft.

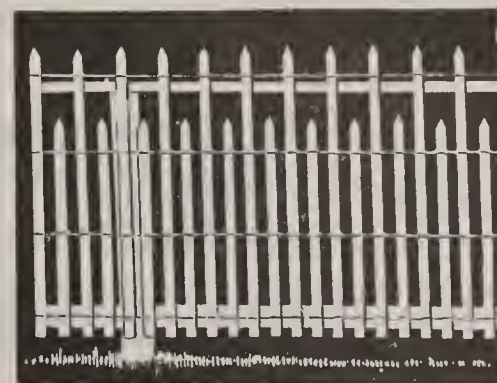
Staggered-Top Lawn and Garden Picket Fencing

PROTECTION

BEAUTY

ECONOMY

The staggered tops, the Gothic pointed pickets, and rich snow-white finish of this Fence combine to give unusual charm and beauty. Its closely spaced pickets shut out effectively even small intruders. The longer pickets are 4 feet in length, and the intermediate pickets are 3 feet long, woven together with four cables of heavily galvanized wire. Pickets are ½ x 1½ inches, surfaced 2 sides, and spaced 2 inches apart. 50-foot roll, \$9.



American Poultry-Yard Gates

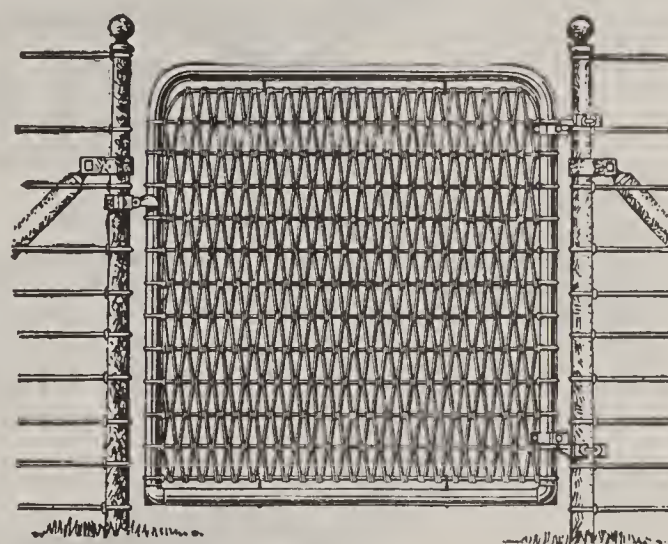
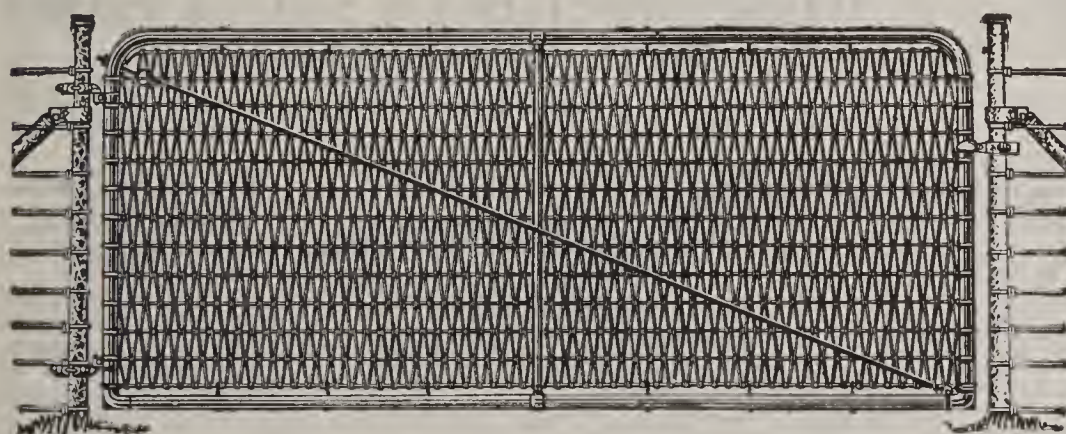
American Steel Gates, always efficient and well designed, have been improved both in structure, finish and operation. The tubular steel frames combine great strength, durability, and beauty. Gates and fittings are thoroughly galvanized.

American frames are covered or filled with a 2-inch mesh fabric of truss form, which not only proves a barrier to the smallest animals while lending bridge-like rigidity and strength, but also makes the Gates unclimbable. The combination of the frame and the truss filling produces the highest type of fence Gate, answering every requirement of good engineering practice.

PRICES

For 3-foot opening, 42 inches high; weight 17 lbs.....\$3 10
For 3-foot opening, 50 inches high; weight 19 lbs..... 3 35
For 3-foot opening, 58 inches high; weight 21 lbs..... 3 60

Above prices include fixtures for wood posts. For fixtures for steel posts, add 50c.



American Single Drive Gates

With galvanized tubular steel frame, filled with a 2-in. diamond mesh galvanized fabric which is unclimbable

A strong, non-climbable, and economical farm Gate. Universally recognized for its simplicity and durability. In addition to upright tubular brace the frame is supported by a diagonal brace rod which keeps it firm and prevents sagging.

PRICES

For 10-ft. opening, 42 in. high; weight 54 lbs...\$7 90
For 10-ft. opening, 50 in. high; weight 59 lbs... 8 40
For 10-ft. opening, 58 in. high; weight 64 lbs... 8 90
For 12-ft. opening, 42 in. high; weight 62 lbs... 8 75
For 12-ft. opening, 50 in. high; weight 68 lbs... 9 50
For 12-ft. opening, 58 in. high; weight 73 lbs... 10 00

Above prices include fixtures for wood posts. For fixtures for steel posts, add 75 cts. F.O.B. factory if not in stock.

"Can't Sag" Gates

"Can't Sag" Gates are neither all wood nor all steel but a happy combination of the two. They retain all good features of wood Gates and the advantages of steel Gates, but have none of the drawbacks of either. They last longer than any other Gate you can build or buy. They weigh only half as much as ordinary all-wood Gates and are stronger than most steel, wire, or gas pipe Gates. They "Can't Sag" even a quarter of an inch. Made of "C" finish, long-leaf pine and painted a rich orange color. The neatest, trimmest-looking Gates ever put up. 12 feet long, 52 inches high, \$10.15; 10 ft. \$8.85.



"Can't Sag" Gate Steels

Consists of 4 pairs of Angle Steel Uprights, Double Truss Braces, Hook Lag Screws, Hinges, Bolts, Washers, directions, etc. to build the Gate as shown above—everything except the boards. Price of set complete, \$4.50.

WIARD PLOWS

Wiard Plows have been continuously manufactured since 1804. Their history has been a record of constant improvement in efficiency, strength and durability, and they are today recognized as leaders in this class of Agricultural Implements.

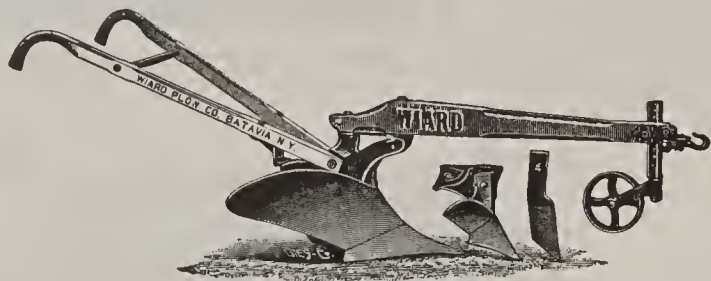
WIARD ONE-HORSE PLOWS

No. 62. Right-Hand



The smallest Wood Beam Wiard Plow. Capacity, 3 to 5 inches deep, 6 to 8 inches wide. Weight, 40 pounds. Plain, \$8.25; wheel, \$1.50 extra.

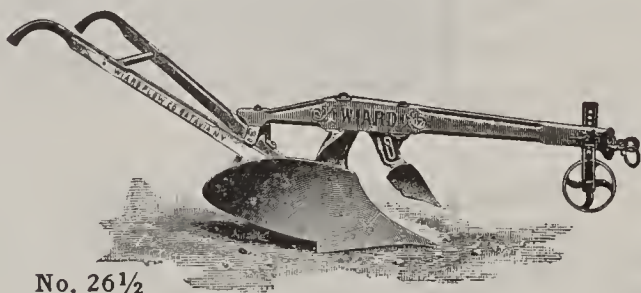
No. 13. Right-Hand. A medium-sized one-horse Plow adapted to all soils. (Not illustrated.) Capacity, 4 to 6 inches deep, 6 to 9 inches wide. Weight, 52 pounds. Plain, \$9.50; wheel, \$1.50 extra.



No. 10C. Right-Hand

Has adjustable beam so that the horse can walk in the furrow or on the land. Capacity, 4 to 7 inches deep, 6 to 11 inches wide. Weight, 77 pounds. Plain, \$13.75; wheel, \$1.50 extra; jointer or colter, \$3.25 extra.

WIARD TWO-HORSE PLOWS



No. 26 1/2

Wood-Beam Plows

No. 27. Left-Hand. Capacity, 6 to 8 inches deep, 10 to 14 inches wide. Weight, 105 pounds. Plain, \$20; wheel, \$1.50 extra; jointer, \$4 extra; steel moldboard, \$1.50 extra.

No. 28. Left-Hand. Capacity, 7 to 9 inches deep, 12 to 16 inches wide. Weight, 112 pounds. Add \$1 to prices of No. 27.

No. 26 1/2. Right-Hand. Capacity, 5 to 8 inches deep, 10 to 14 inches wide. Weight, 115 pounds. Plain, \$20; wheel, \$1.50 extra; jointer, \$4 extra; steel moldboard, \$1.50 extra.



No. 44

Steel-Beam Plows

No. 103. Left-Hand. Two-horse. Capacity, 4 to 7 inches deep, 9 to 13 inches wide. Weight, 120 pounds. Plain, \$19; wheel, \$1.50 extra; jointer, \$4 extra; steel moldboard, \$1.50 extra.

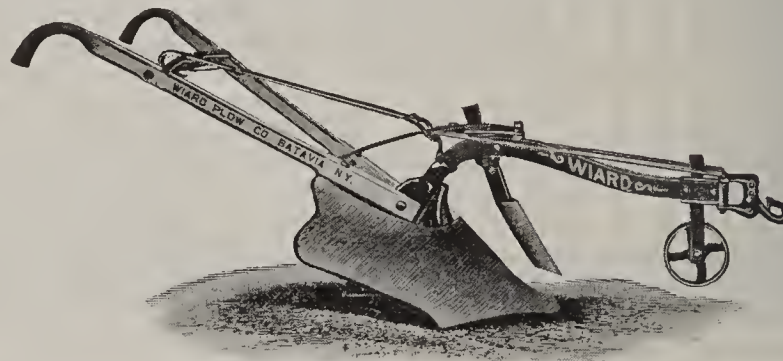
No. 104. Left-Hand. Two- or three-horse. Capacity, 5 to 8 inches deep, 11 to 15 inches wide. Weight, 130 pounds. Add \$2 to prices of No. 103.

No. 43. Right-Hand. Same capacity, size, and price as No. 103 Left-Hand.

No. 44. Right-Hand. Same capacity, size, and price as No. 104 Left-Hand.

WIARD SWIVEL OR HILLSIDE PLOWS

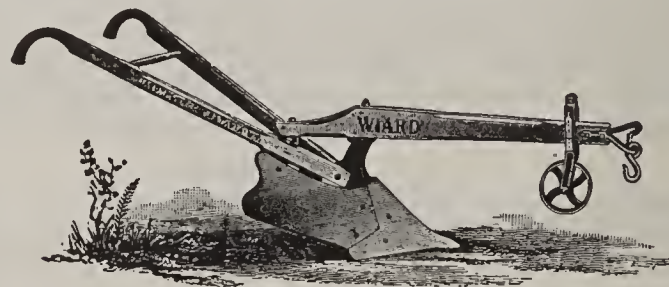
All of the Two-Horse Plows shown here are furnished with either Common or Adjustable Clevis, as shown in the illustration.



WIARD STEEL-BEAM SWIVEL PLOWS

No. 120. Capacity, 5 to 8 inches deep, 10 to 13 inches wide. Weight, 118 pounds. Plain, \$20.75; adjustable clevis, \$1.30 extra; wheel, \$1.50 extra; jointer, \$4 extra; colter, \$3.50 extra; steel moldboard, \$1.50 extra.

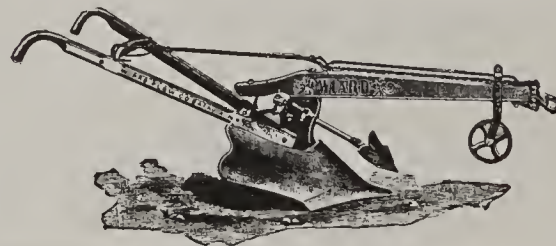
No. 126. Capacity, 5 to 8 inches deep, 12 to 15 inches wide. Weight, 139 pounds. Add 50 cts. to prices of No. 120.



WIARD WOOD-BEAM SWIVEL PLOWS

No. 21. One-Horse Swivel Plow

Capacity, 4 to 7 inches deep, 6 to 10 inches wide. Weight, 77 pounds. Plain, \$13; wheel, \$1.50 extra; steel moldboard, \$1.30 extra.



No. 140. Two-Horse Swivel Plow

The cut shows Plow with adjustable clevis and jointer. Capacity, 5 to 8 inches deep, 10 to 13 inches wide.

Weight, 115 pounds. Plain, \$19.50; adjustable clevis, \$1.30 extra; wheel, \$1.50 extra; jointer, \$4 extra; colter, \$3.50 extra; steel moldboard, \$1.50 extra.



No. 130X. Two-Horse Swivel Plow

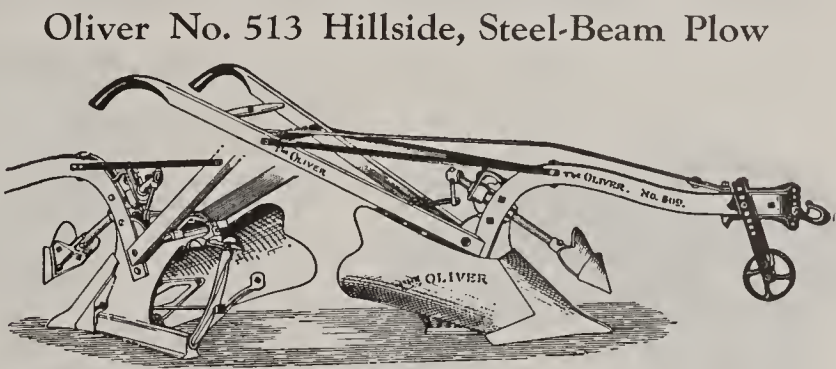
Capacity, 5 to 8 inches deep, 10 to 13 inches wide. Weight, 104 pounds. Plain, \$18; adjustable clevis, \$1.30 extra; wheel, \$1.50 extra; steel moldboard, \$1.50 extra.

OLIVER CHILLED PLOWS

The Oliver Chilled Plows need no introduction to the Pennsylvania farmer. We have space to show but a few of the leading favorites among Pennsylvania farmers, but will send a complete catalogue on request. A full line of genuine Oliver repairs always in stock.



This is the veteran Plow of the Oliver line and for many years it has been familiar to a majority of the farmers in America. Its great capacity, steady running and turning qualities, make it valuable in sandy or alluvial lands, and on farms containing a variety of soils. It will turn a furrow 9 x 16 inches. Weight of Wood-Beam, 138 lbs.; Steel-Beam, 157 lbs.
Price, Wood- or Steel-Beam, Plain, \$20.35. For Wood-Beam, Wheel extra \$2.50; Jointer extra \$3.85. For Steel-Beam, Wheel extra \$2.20; Jointer extra \$4.95.



This Plow has a distinctive design to the moldboard. It is recommended for conditions where scouring is difficult—the moldboard being short and with sufficient curvature to effectively turn the soil. It is well adapted for plowing sod as well as stubble. Chilled bottoms, trussed steel beam, strong wood handles make this a very serviceable Plow. Bottoms are long, insuring steadiness and ease of handling. Capacity, 8 x 15 inches. Weight, 160 lbs. Price, Plain, \$21.60; Wheel extra \$1.65; Jointer extra \$3.30.

Prices of other Oliver Chilled Plows

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra	No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
BN.	Wood	Right	5 x 10	71	\$12 35	\$1 65	\$3 60	84.	Steel	Right or Left	8 x 16	158	\$20 65	\$2 20	\$4 70
10N.	Wood	Right	5½ x 11	74	13 75	1 65	3 60	153.	Trussed Steel	Hillside	5 x 8	70	12 50	1 65	
E1N.	Wood	Right or Left	7 x 14	132	21 00	2 50	3 85	512.	Trussed Steel	Hillside	8 x 13	139	21 30	1 65	3 30
83N.	Steel	Right or Left	7 x 14	146	19 00	2 20	4 70								

SPECIAL CIRCULARS OF ANY OF ABOVE PLOWS MAILED ON REQUEST

Vulcan Chilled Plows

The Vulcan Chilled Plow has been manufactured for more than a half century and is considered by many users as the best Chilled Plow manufactured. They are equipped with ribbed moldboards, which act as strengthening braces, and corrugated points, which it is claimed will outwear ordinary points and also hold a cutting edge a greater length of time.

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra	No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
No. 10.	Wood	Right	6 x 11	83	\$14 00	\$1 60		No. 14.	Steel	Right or Left	8 x 14	155	\$18 50	\$1 60	\$5 00
No. 13.	Wood	Right or Left	8 x 13	127	17 50	1 60	\$4 50	No. 10.	Steel	Hillside	7 x 10	112	16 50	1 60	5 50
No. 14.	Wood	Right or Left	8 x 14	135	19 00	1 60	4 50	No. 12.	Steel	Hillside	8 x 12	143	21 50	1 60	5 50
No. 13.	Steel	Right or Left	8 x 13	145	17 50	1 60	5 00								

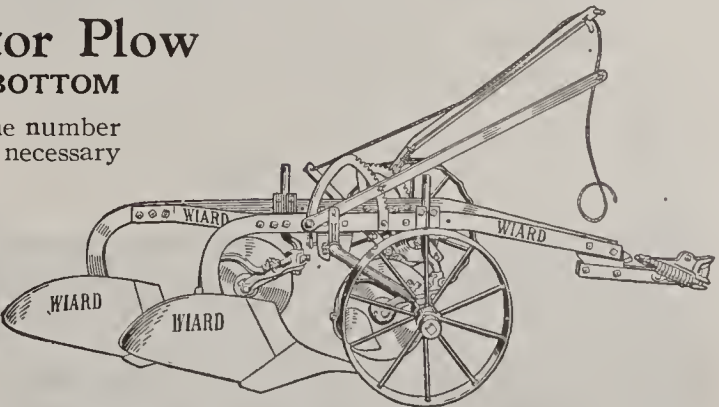
Wiard Road or Contractor's Plows



No. 64. A light Plow intended for road-repair work. It has excellent turning qualities and will hang to the ground on a hard and difficult job. Weight, 160 pounds. Price, with steel beam, shoe and forged steel point, \$40.50.
No. 65. A medium-weight Plow intended for general contracting work. Weight, 200 pounds. Price, with cast-iron beam, cast-iron point, \$32; with forged steel point, \$37. No. 65, with steel beam and forged steel point, \$51.25.
No. 69. Intended for use with either animal power, tractor, or road-roller. For all road or contractors' work—for tearing up cobble-stones and macadam—it can be used as a rooter Plow by simply removing the steel wing below the moldboard—thus making a two-in-one Plow for all-round work. Weight, 315 lbs. Price, with steel beam, and forged steel point, \$67. (Shoe for end of beam included at prices quoted on all Plows.)

Wiard No. 32 Tractor Plow
TWO BOTTOM OR SINGLE BOTTOM

This Plow is constructed with an idea to simplicity, efficiency, and strength. The number of parts has been reduced to a minimum, knowing that with few parts making all necessary adjustments a standard of desirability in Plow construction has been attained. Ease of draft, smoothness of furrow, and durability of Plow are unexcelled. There is a good easy turn to the moldboard but it puts the furrow over, covering all vegetation, manure, or trash of any kind.
The Plow is equipped with safety-spring trip-hitch, assuring safety to Plow, Tractor, and operator. Operating levers are easily reached from the Tractor seat and adjustment made without difficulty with one hand while plowing. Weight of two bottom Plows, 650 lbs.; weight of single bottom Plow, 485 lbs.

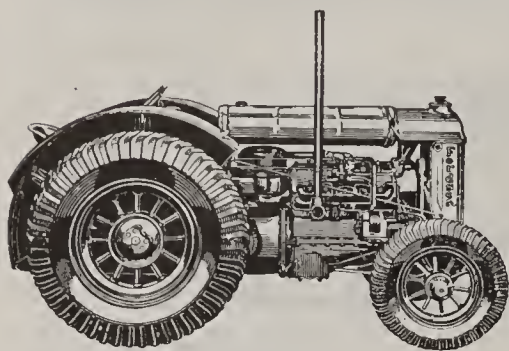


PRICES		PRICES	
Two Bottom; capacity, 24 to 28 inches wide, 5 to 9 inches deep		Single Bottom; capacity, 16 to 18 inches wide, 6 to 10 inches deep	
With chilled bottoms, combined rolling colters and jointers..	\$98 00	With chilled bottom, combined rolling colter and jointer.....	\$83 25
For steel moldboards instead of chilled, add.....	3 00	For steel moldboards instead of chilled, add.....	1 50
For jointers instead of combined rolling colters and jointers, deduct.....	8 00	For jointer instead of combined rolling colter and jointer, deduct.....	4 00

The New Fordson Tractor

A New Fordson Tractor That is Rugged and Simple in Design and Economical to Operate

Standard Model Fordson



Standard Fordson equipped with low-pressure agricultural tires

Descriptive Circular and Prices on Request

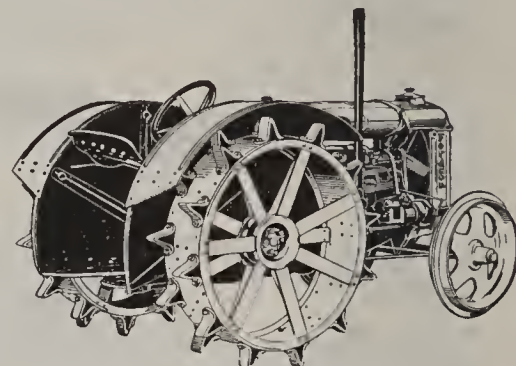
The New Fordson Agricultural Tractor of today gives the farmer a Tractor with ample power to haul two 14-inch bottom plows, and delivers 30 H. P. at the belt, with the motor running at 1,100 R. P. M.

The New Fordson is easily started, being equipped with the latest type high-tension magneto with impulse starter.

An improved lubrication system, with a larger crank-case and oil-filter screen, new water-cooling system with pump, and new 12-plate transmission brake.

Heavy fenders and platform are standard equipment. Choice of three fuel carburetors—gasoline, kerosene, or fuel-oil. The latest centrifugal type of governor is now used. Weight of Tractor, approximately 3,126 pounds.

The New Fordson is a powerful, compact, sturdily built Tractor, with the framework of single-unit construction, and all working mechanism enclosed. It will give dependable, economical farm transportation and farm power.



Standard Fordson equipped with spade lugs

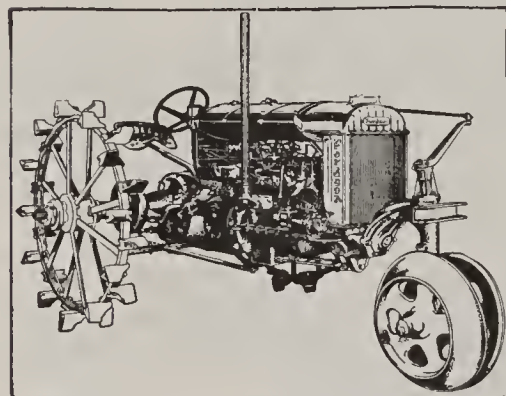
We carry Repair Parts for all models Fordson Tractors in stock

All-Around Model Fordson

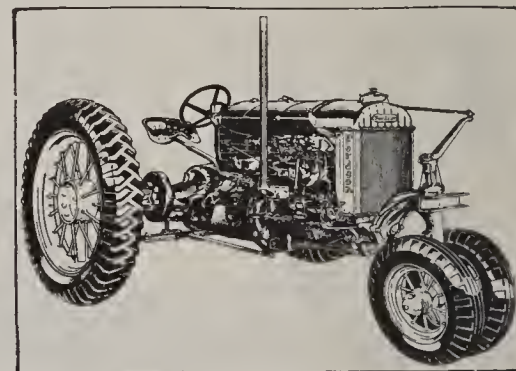
Fundamentally, the All-Around Fordson is the same as the Standard Fordson that has been proved by actual farmwork. There are no radical changes in its vital parts. Same engine, same type transmission, same differential. Same rugged, economical Tractor.

The changes have to do entirely with increasing its versatility and its usefulness. It is now a high-clearance Tractor built to handle row-crop implements and do all the other Tractor jobs just as efficiently as before.

The All-Around Fordson is equipped with independent brakes to facilitate turning. Rear wheels can be quickly adjusted to the right width for different row crops. Choice of either steel wheels with spade lugs or low-pressure farm tires.



All-Around Fordson equipped with spade lugs



All-Around Fordson equipped with low-pressure agricultural tires

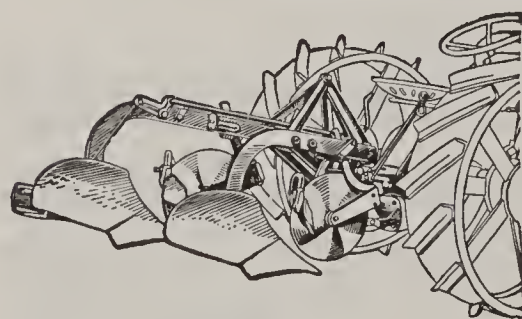
The New Ferguson Plow Adaptable to all plowing conditions

The Ferguson, when attached to the Fordson or certain other tractors, becomes part of the tractor—a single integral unit. Because of this unit principle, and because of the revolutionary line of draft it secures penetration by pull instead of weight.

The Ferguson handles easily in small and irregularly shaped fields, and plows corners and tight places as well as the wide-open spaces. Quickly attached or detached, and is easily raised or lowered, with one hand, from the driver's seat. The Ferguson Plow can be used only with the Fordson, I. H. C. 10-20 or I. H. C. W-12 Tractor. Made in three sizes:

	1930 model	1935 model
	Fordson hitch	Fordson hitch
16-inch Single Bottom. Weight 265 lbs.....	\$83 00	\$88 50
12-inch Two Bottom. Weight 360 lbs.....	90 00	96 00
14-inch Two Bottom. Weight 360 lbs.....	99 00	104 50

Above prices include combination rolling colters and jointers. Descriptive circular on request



Holland Hillside or Offset Hitches

Used wherever an Offset Hitch is needed. Saves time plowing hillside and helps turn the furrows over completely.

No. 200. Operates by hand-lever. For Fordson \$6.35.

No. 50. Operates by hand-wheel. For Fordson \$8.25.

Either hitch for McCormick-Deering Tractors 50 cts. additional. Circular on request.

Space does not permit a listing of the following lines in this catalogue. Special catalogue and prices will be sent on request.

Ann Arbor Hay-Presses
Farquhar Threshers and Saw Mills
Rosenthal Corn-Huskers and Shredders
Martin Corn-Cribs

Regardless of what you want in the line of Farm Machinery, consult us before buying

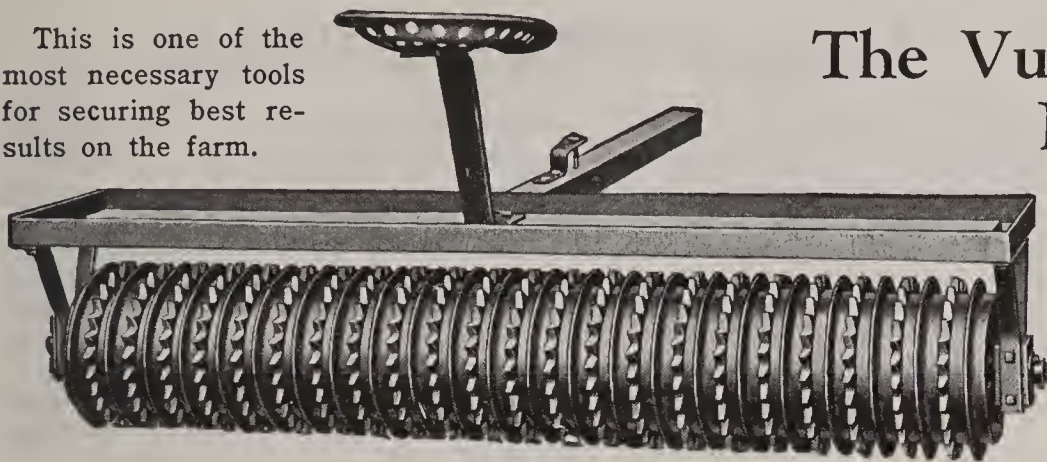


For New Equipment
or Changeovers—
Ask us

GOODYEAR Farm Implement Tires

Cover the ground faster, save on fuel, repairs, wear and tear, travel quickly from job to job—provide comfortable riding instead of hard jars, enable you to work in clear air instead of dust-clouds.

This is one of the most necessary tools for securing best results on the farm.



The Vulcan Disc and Sprocket Roller Pulverizer

To grow crops successfully, it is necessary to retain moisture in the ground; to accomplish this the top soil must be kept from crusting, and this can be done thoroughly and easily by using a Vulcan Sprocket Pulverizer.

The sprocket or spike-rings break the clods, and together with the solid discs, pulverize and pack the soil and prevent rapid evaporation.

For planting corn, this machine will prepare a better seed-bed than can be completed in any other

way. It levels and pulverizes the soil and leaves the top packed firmly with fine mulch in perfect condition for receiving the seed. Also, in preparing a seed-bed for alfalfa or other grain, it cannot be surpassed, and it is exactly suited for breaking the crust which forms on winter wheat. For rolling corn, we supply spacing collars so that some discs can be removed and the remainder held at the proper width.

End brackets are in one piece, giving rigid connection. End bearings are made of maple, soaked in oil, and are reversible. Strongly constructed throughout and will give you long and satisfactory service.

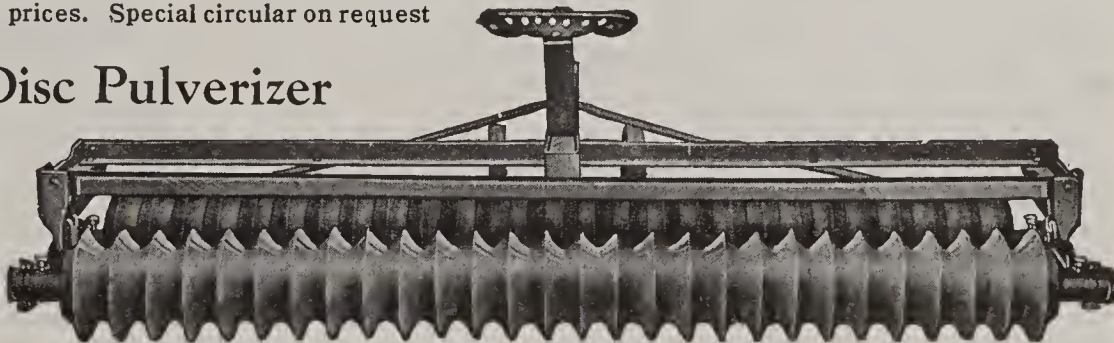
8-ft., Single Section. Weighs 925 lbs.....	\$64 50	11-ft., Three-Section. Weighs 1,388 lbs.....	\$97 50
9-ft., Single Section. Weighs 1,028 lbs.....	73 50	15-ft., Three-Section. Weighs 1,880 lbs.....	127 50
10-ft., Single Section. Weighs 1,328 lbs.....	83 00	Doubletrees and Neckyoke, extra.....	3 50

Furnished with long pole or tractor hitch at above prices. Special circular on request

Buch's Double Gang Disc Pulverizer

This tool has two gangs of iron discs which crush and cut lumps, pack out all air-spaces, and level the surface of the field, all in one operation.

The discs of the back gang come between those of the front gang so that no lumps are missed. This Pulverizer, with a harrow for bringing up the lumps to the top, will make a perfect seed-bed in any soil. The discs of the front gang build up a set of ridges and the back gang, coming half way between, splits and works these ridges over, thus stirring the soil.



	Length	Rolling Width	Diam. Front Disc	Diam. Rear Disc	No. Sections	Weight	Price
No. 626.	7 ft.	74 in.	15 in.	12 in.	37	900 lbs.....	\$68 00
No. 627.	8 ft.	84 in.	15 in.	12 in.	43	1,000 lbs.....	74 00
No. 628.	9 ft.	98 in.	15 in.	12 in.	49	1,100 lbs.....	85 00
No. 630.	11 ft.	122 in.	15 in.	12 in.	61	1,350 lbs.....	104 00

Furnished with long pole for horses or tractor hitch. If both long pole and tractor hitch are wanted, add \$3 to above prices. Doubletrees and Neckyoke, extra \$2.50.

Pittsburgh Steel Land Roller

Drums or rolls are made of heavy, 12-gauge high carbon steel, with pressed steel ends, and will not dent.

Axles are 1 5/8 inches in diameter; angle frame of high carbon steel, 3 x 3 x 5/16 inches.

Hangers are of heavy wrought steel with hardwood boxings.

The frame is constructed so that it may be used as a weight-box should additional weight be required.

Pole sets on top of frame, thus enabling us to use shorter and more rigid hangers. The hitch is underneath the tongue, reducing the draft and neck weight to a minimum. 8-foot, 3 section, 24 inches in diameter. Weight 535 pounds, \$38.50. Doubletrees and Neckyoke, extra \$2.50.



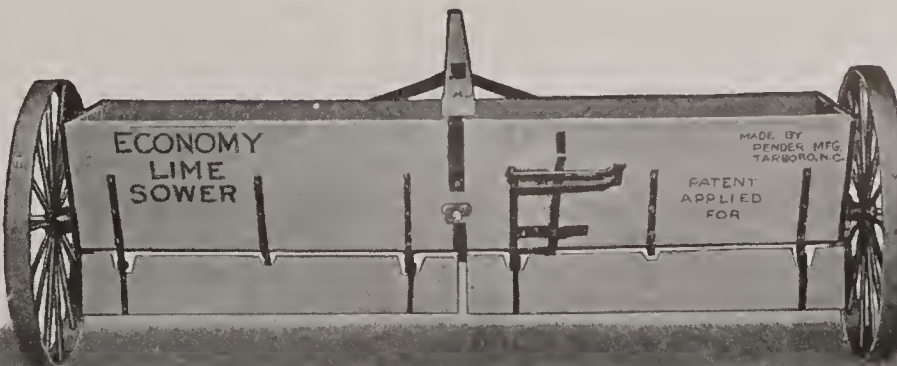
Economy Lime and Fertilizer Sower

Furnished for one or two horses. In lengths 5, 6, 7, 8, 9, or 10 feet

Very strongly built. Positive feed, caused by rotary feeder-bars attached to spiders, or arms on axle, forcing material out evenly through large, oval-shaped holes in bottom, located 2 7/8 inches apart. Each wheel drives its respective half axle. Flow positively controlled and gauged by adjustment of lever on back of machine. Grease-cup in rear feeds grease to center bearings.

Hopper is made of yellow pine and has a capacity of 500 to 700 pounds. Furnished with steel wheels, 36 inches high, with 3-inch tires. Bearings are of solid oak and oil soaked. Capacity 200 to 5,000 lbs. per acre.

No. 800. 8-ft. 2-horse. Weight 375 lbs. \$58. Double-tree and Neckyoke, or Tractor Hitch, \$4 extra. Furnished with 5-inch tires, \$3.50 extra. Prices on other sizes quoted on request.



Hallock Walking Weeder



No successful farmer of today considers that his outfit of modern tools is complete unless he has a Weeder. The experience of the last few years has satisfied all users of this tool that it is one of the most important on the farm, and is an absolute necessity for best results. In its operation it works over and among the plants without injury, destroys all the small weeds, breaks up the crust, mellows the ground, and in this way puts the plants in best possible condition for rapid growth. The Weeder is substantially built from the best of materials. The teeth are located in three rows, and they are made of high-quality steel all properly shaped for best work. Equipped with runners for transporting to and from the field. Made in two sizes.

7½-foot, with 39 teeth and runners. Weight 90 lbs.\$13 50
9-foot, with 45 teeth and runners. Weight 100 lbs. 15 50

Farquhar Riding Weeder

**KILLS WEEDS • CONSERVES MOISTURE
STIMULATES PLANT-GROWTH**

This is the most profitable implement on the farm. Kills small weeds close around the plants at a time when the weeds are easy to kill and when the tender plants need all the sunshine and air available.

The Weeder may be used immediately after planting, keeping the surface of the soil loose and friable and at the same time destroying the weed seeds as they germinate.

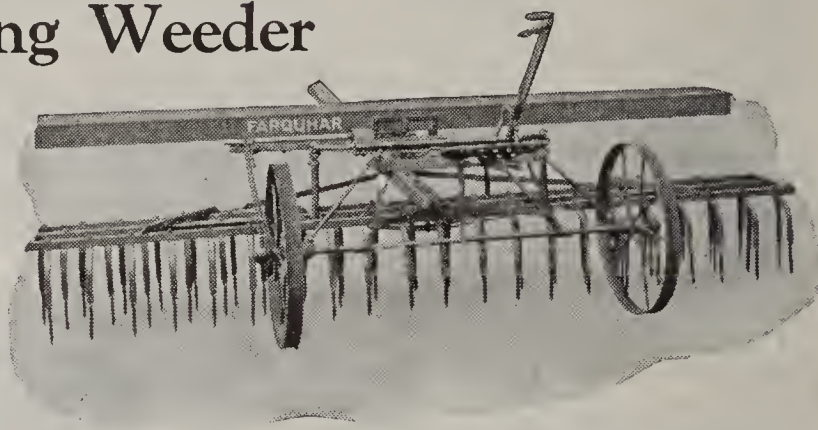
Cultivation with the Weeder prevents the ground from "baking" or forming a hard crust. For this reason the use of the Weeder prevents plant-retardation, and by reason of the loose, friable soil, plant-growth is stimulated.

The Farquhar Riding Weeder has distinctive features which commend it to progressive farmers: The angle-iron frame is strongly built; the 30-inch wheels are mounted on a steel axle with adjustable axle braces which prevent springing or bending of axle when wheels are widest spread. These braces are fastened to set collars on inside of wheels and are adjusted with a set screw, permitting a wheel-spread from 46 to 60 inches, straddling one or two rows when spaced from 30 to 42 inches apart.

There are 63 teeth of high carbon steel and goose-neck shape.

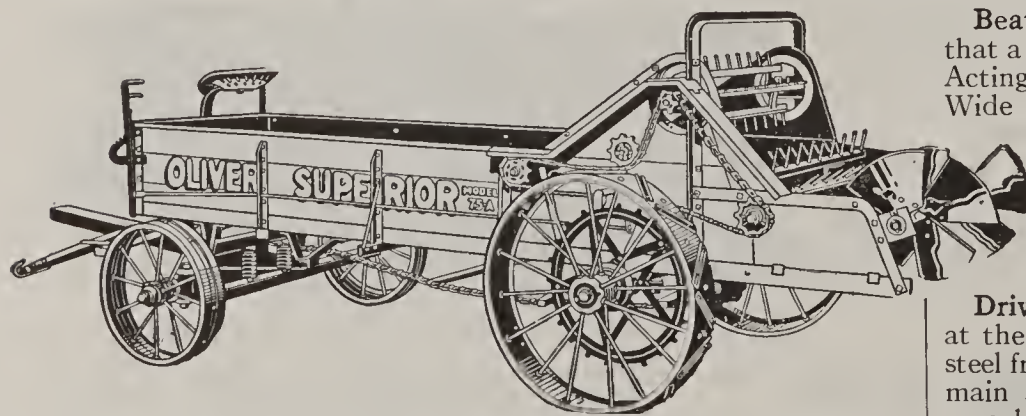
The tooth-bars are balanced on the tongue instead of on the lifting lever, which is not only more convenient and easier to operate with an even balance, but assures a more even and uniform cultivation.

The Grass Seed Attachment, supported by a steel frame and the tongue, sows in front of the teeth and is driven from the sprocket on the ground wheel. Quantity ranges from 4 to 20 quarts per acre. Width 12 feet. Price \$46.75. Standard Neckyoke and Evener \$3.75. Wide Neckyoke and Evener \$5.25. Grass Seed Attachment, extra if wanted, \$23.50.



Oliver Superior Manure Spreader

With Many Advanced Features That Make Easier Handling, Better Spreading, Longer Life



The value of manure as fertilizer is well known. Here is a Spreader that makes it simple to get it on the ground properly spread, in correct amounts, with the least possible labor in the shortest space of time.

Box and Frame: The frame is entirely of steel. The sills are single-angle beams, extending the full length of the Spreader in a straight line. The angle-bars which carry the box, and the rear frame which carries the working parts, are solidly fastened to the sills so that the correct alignment is always maintained. The wheel mountings also are directly and solidly attached to the frame.

The box is of clear long-leaf yellow pine. This material was selected because the wood is more immune from rot than sheet steel is from rust and, of a consequence, will last longer.

Beater: The teeth of the main 8-bar cylinder are so spaced that a tooth hits the load every ¼ of an inch across its full width. Acting with the 4-bar top cylinder, it sends the manure to the Wide Spread in a steady, even stream. The 8 cleaver-shaped blades of the Wide Spread are placed so as to form a counterbalanced cylinder, securing both uniform, even speed and steady drive. Revolving at high speed, they pulverize the manure with both a cutting and a smashing action, distributing it evenly over the full width of the spread.

Drives and Bearings: All shafts run in Hyatt Roller Bearings at the driven end. All are carefully and securely aligned in the steel frame and driven by direct inter-connected chain drives. The main and top cylinders are driven directly from the main-drive sprocket and the Wide Spread is direct driven from the main cylinder. All bearings are Alemite-Zerk pressure lubricated.

Feed-Range: Four to twenty-eight leads per acre—the greatest found on any Spreader, and is adjustable from the seat, so that the manure can be spread at the rate desired.

Many Other Features. Automotive-type steering, turns completely around on a 14½-foot circle; easy to load, only 39½ inches from the ground to the top of the box. Conveniently grouped controls; front and rear axle both spring hung. Axles and shafts, high carbon cold rolled steel.

Capacity 75 bus. Length of bed 10 ft., 6 in.; width at front 38½ inches; rear 40¼ inches. Front wheels, 26 x 5½ inches; rear wheels 36 x 7 inches. Weight, 1,565 lbs. Price, with 2-horse hitch or tractor hitch, \$180. Brake extra, if wanted, \$9. 3-horse hitch, extra, \$4.40.

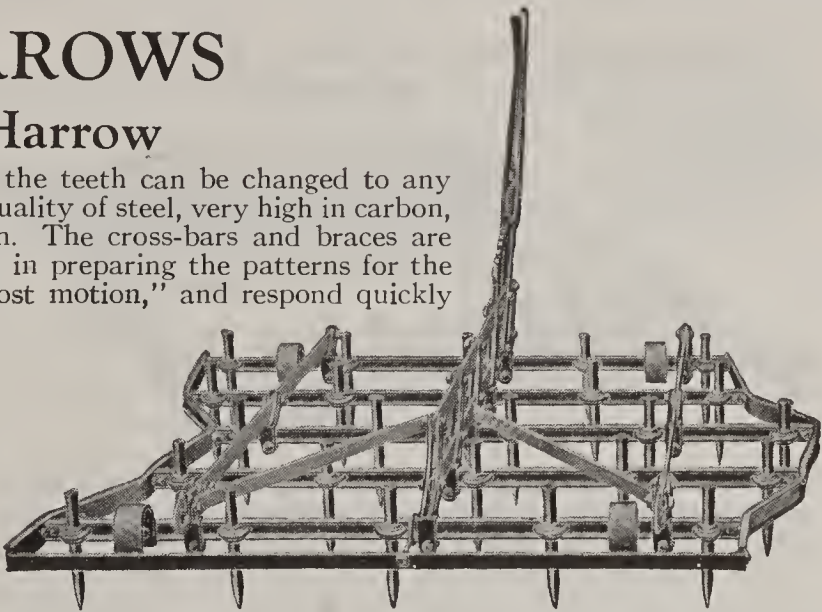
SPIKE TOOTH HARROWS

“Columbian” Steel Lever Harrow

The Columbian Harrow is made with lever adjustment, so that the teeth can be changed to any slope quickly. The main-bars are U-shaped, and made from an extra quality of steel, very high in carbon, which insures it against bending, even under the most severe strain. The cross-bars and braces are rolled flat from same kind of material. Great pains have been taken in preparing the patterns for the different parts, so that when put together they will be free from “lost motion,” and respond quickly to the action of the lever.

The tooth-clamp is without doubt the best yet devised and consists of stirrup bolt and back and front boxing. When fastened with this device, the teeth would not be more rigid if a part of the bar itself. Teeth can be raised or lowered any distance. Furnished with $\frac{1}{16}$ -inch teeth. It is securely braced and nicely finished.

		Weight	Width	Price
25-tooth	1 Section	110 lbs.	4 ft.....	\$13 25
50-tooth	2 Sections	250 lbs.	8 ft.....	23 85
60-tooth	2 Sections	280 lbs.	10 ft.....	26 25
90-tooth	3 Sections	425 lbs.	15 ft.....	40 00
120-tooth	4 Sections	565 lbs.	20 ft.....	53 50

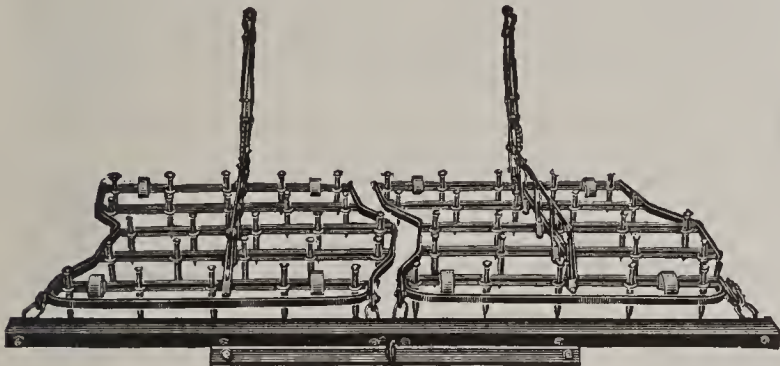


Showing 25-tooth Section of Columbian Harrow

Pittsburgh Head-Rail Harrow

This Harrow is equipped with good lever device giving instant adjustment and desired slant to the teeth, thus adapting the Harrow to general-purpose work or for finishing and smoothing operations. It will also answer the purpose of a weeder for the first cultivation of corn and potatoes. The heavy solid steel hitch-bar across the front braces the Harrow securely and is provided with malleable hitch-hooks. Harrow has flat runners, and the close-fitting back boxing in connections with “U” stirrup makes a very secure tooth-fastening. Furnished with $\frac{9}{16}$ -inch teeth.

		Weight	Width	Price
25-tooth	1 Section	100 lbs.	4 ft.....	\$11 00
50-tooth	2 Sections	225 lbs.	8 ft.....	19 00
60-tooth	2 Sections	250 lbs.	10 ft.....	21 75
90-tooth	3 Sections	380 lbs.	15 ft.....	33 00
120-tooth	4 Sections	510 lbs.	20 ft.....	44 00



50-Tooth Pittsburgh Head-Rail Harrow

SPRING TOOTH HARROWS

Iron City Pipe Bar Lever Harrow

The Iron City Spring-Tooth Steel-Frame Lever Harrow shown here represents one of the most popular types of this class of Harrows.

The Iron City has angle steel frame, runner style, and the front of the Harrow is constructed with a view to prevent the gathering of trash.

Renewable steel shoes are bolted to the under side of all frame angles, and can be replaced at moderate expense.

The tooth bars are steel pipe, to which the teeth are bolted and held securely with the assistance of spanner clips. All teeth are carefully tested before shipment and are guaranteed against defects.

		Weight	Price
15-tooth	2 Sections	225 lbs.....	\$24 00
17-tooth	2 Sections	240 lbs.....	25 50
23-tooth	3 Sections	347 lbs.....	36 00
25-tooth	3 Sections	362 lbs.....	38 00



17-Tooth Iron City Lever Harrow

Pittsburgh Perry Wood-Frame Harrow

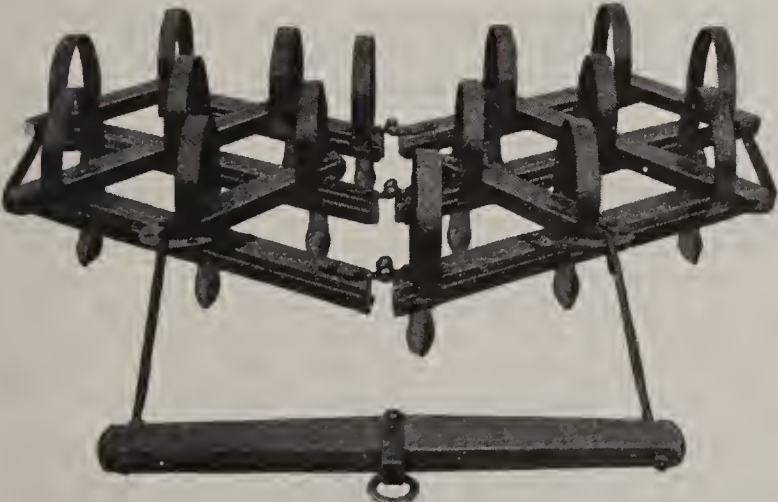
Steel Lined, Guarded, Protected Bolt Heads, Perfect Tooth Seat, Adjustable Hitch

The best Wood-Frame Harrow on the market. Beams full 3 inches; linings $\frac{3}{8}$ -inch angle steel; bolts $\frac{3}{8}$ -inch; teeth are full length and weight, tempered in oil and fully warranted; our tooth fasteners are channel steel. Steel braces support and strengthen the outer end of the Harrow.

These Harrows are well made of best oak and hinged properly so that they will not buckle in the middle, but ride evenly, pulling all teeth in the ground at about an even depth.

Teeth are made from open-hearth, high-carbon spring steel, oil-tempered and tested.

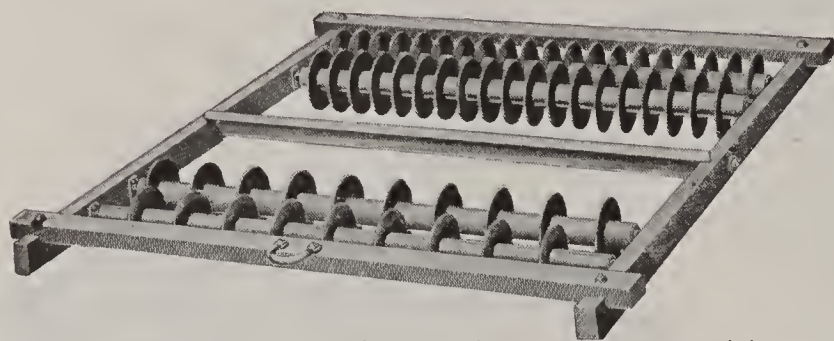
		Weight	Price
16-tooth	2 Sections	190 lbs.....	\$17 75
18-tooth	2 Sections	210 lbs.....	19 00
20-tooth	2 Sections	237 lbs.....	20 50
22-tooth	2 Sections	261 lbs.....	22 50
24-tooth	2 Sections	280 lbs.....	24 75



16-Tooth Pittsburgh Perry Harrow

Meeker Smoothing Harrow

Prepares a Fine Seed-Bed



The Meeker Smoothing Harrow is a perfect pulverizing and smoothing Harrow and land-roller combined. It has four sets of rollers containing 46, 58 or 82 discs, depending upon the size, the discs being set so as to overlay or meet.

These discs grind up all lumps, leaving the soil fine and smooth. The discs of one roller work between those of the other, which prevents clogging even in damp soil. The board in the center, set at an angle, can be adjusted up and down and serves as a leveler.

The Meeker will prepare any type of soil—sand, clay or muck—stirring and pulverizing it to a depth of 4 or 5 inches.

PRICES

4-ft. 6-in. x 4-ft. Harrow, with 46 8-in. discs.....	\$30 00
4-ft. 6-in. x 4-ft. Harrow, with 46 10-in. discs.....	33 75
6-ft. 8-in. x 6-ft. Harrow, with 58 8-in. discs.....	35 00
6-ft. 8-in. x 6-ft. Harrow, with 58 10-in. discs.....	41 00
8-ft. x 6-ft. Harrow, with 82 8-in. discs.....	45 00
8-ft. x 6-ft. Harrow, with 82 10-in. discs.....	52 50

Also a very valuable implement for use on golf-courses.
Ask for special circular

Dayton Tractor Disc Harrow

A strong and substantially built Disc Harrow that can be used with any make of tractor. It has several distinctive features and is suitable for general farm-work. The angle of the gangs may be increased or decreased by means of a wheel which is within easy reach from the tractor seat, or they may be controlled independently of each other by means of a simple adjustment in the connection between the rear gangs and the angling arrangement.

The flexibility of the frame saves the Harrow from the wrenches and twists due to uneven ground, and yet the rear gang is held to its work perfectly and will not sway from side to side.

The bearings are made of a wood boxing on top while on the bottom there is provided a reservoir for an oil-soaked felt pad. As the bearing turns it transfers oil to the wood boxing and keeps it continually lubricated, eliminating the use of inconvenient grease-cups. The discs are heat-treated for hardness, toughness, and strength. Both gangs are equipped with scrapers.

No. Discs	Diam. Discs	Width of Cut	Weight	Price
24	16 in.	6 ft.	790 lbs.....	\$89 00
28	16 in.	7 ft.	865 lbs.....	96 00
32	16 in.	8 ft.	945 lbs.....	103 00

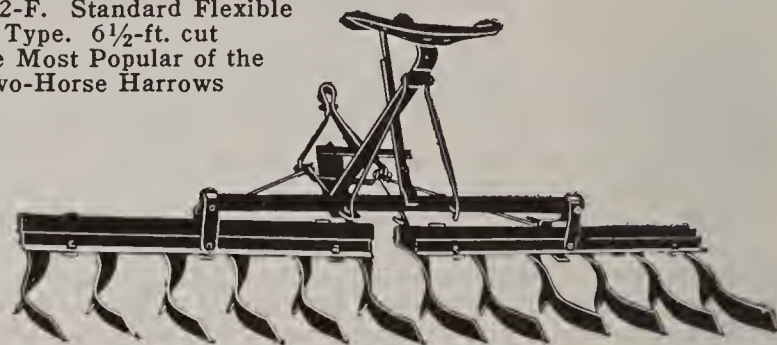


Columbus Steel Drag Scraper

"Acme" Coulter Harrow

A PULVERIZING HARROW AND SURFACE CULTIVATOR

No. 12-F. Standard Flexible
Type. 6½-ft. cut
The Most Popular of the
Two-Horse Harrows



The coulters on "Acme" Pulverizing Harrows work down between the furrow slices, filling the air-spaces with finely pulverized soil—lumps and clods are thoroughly broken up and pulverized; trash or stubble that has been carefully plowed under is not dragged to the surface as is the case with many other types of Harrows but is left beneath the surface where it rapidly rots and adds humus to the soil. The seed-bed prepared by the "Acme" Harrow is so well compacted that the seed will germinate rapidly; the surface is finely mulched so that the moisture is conserved.

New Coulters make an old "Acme" Coulter Harrow almost as good as new.

No.	Weight	Width	Description	Standard Type
*6	77 lbs.	3 ft.	1 horse, 1 section, 6 coulters	\$16 50
*8	94 lbs.	4 ft. 4 in.	1 horse, 1 section, 8 coulters	23 00
*12	112 lbs.	6 ft. 6 in.	2 horse, 1 section, 12 coulters	26 00
12-F	124 lbs.	6 ft. 6 in.	2 horse, 2 section, 12 coulters	30 00
16-F	151 lbs.	8 ft. 6 in.	2 horse, 2 section, 16 coulters	36 50
Coulters	3½ lbs.			85

*Rigid Frame.

Prices on other sizes quoted on request

We carry in stock a line of repair parts for the Implements we sell. We also make a specialty of furnishing repairs for all makes of farm machinery

The most economical tool made for making and mending roads. The Columbus is the highest type of Drag Scraper made. The bowls are stamped from a single sheet of extra hard steel plate and are of seamless construction throughout. The round-top handles are a distinguishing feature. The bails are of steel and of improved pattern, with strong and perfectly working swivels.

No. 1. Approximate capacity 7 cubic feet. Size of bowl: length over all 32½ inches; width 33 inches; greatest depth 10½ inches; weight 105 pounds. With runners, \$10.65.

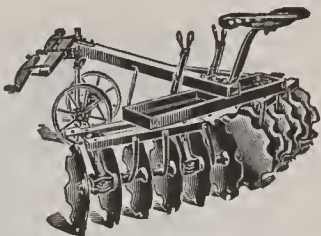
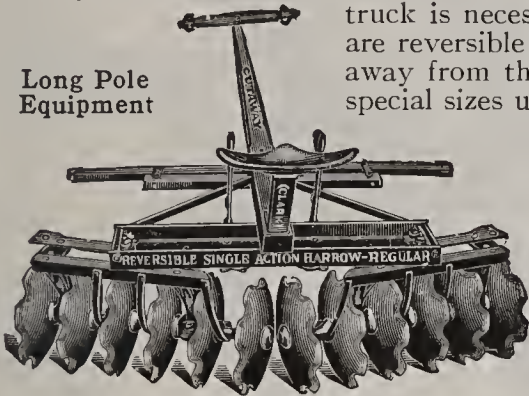
No. 2. Approximate capacity 5 cubic feet. Size of bowl: length over all 30½ inches; width 29½ inches; greatest depth 10½ inches; weight 95 pounds. With runners, \$10.

Clark
"CUTAWAY"

Reversible Single-Action Harrow

The head is built directly on top of the gangs of discs; the weight of the frame and of the driver is carried by the discs. This balances the Harrow with practically no weight on the horses' necks so no tongue truck is necessary. However, tongue truck can be furnished if desired. Gangs are reversible; this enables the orchardist to throw the soil toward the trees or away from them. Extension-head Harrow can be closed for regular fieldwork; special sizes up to 14 feet wide. Write for circular.

Long Pole
Equipment



Tongue Truck Equipment

REGULAR HEAD				EXTENSION HEAD			
	Hitch	Width cut	Weight	Price	Width cut	Weight	Price
10	16-in. discs, 2-horse,	5 ft.	290 lbs.	\$50 00	7 ft.	315 lbs.	\$52 50
12	16-in. discs, 3-horse,	6 ft.	340 lbs.	56 50	8 ft.	390 lbs.	61 00
10	18-in. discs, 2-horse,	5 ft.	345 lbs.	55 00	7 ft.	380 lbs.	58 00
12	18-in. discs, 3-horse,	6 ft.	425 lbs.	64 00	8 ft.	455 lbs.	68 50

If Tongue Truck is wanted instead of the Long Pole, add \$8.50 to above prices.
If both Tongue Truck and Long Pole are wanted, add \$10 to above prices.

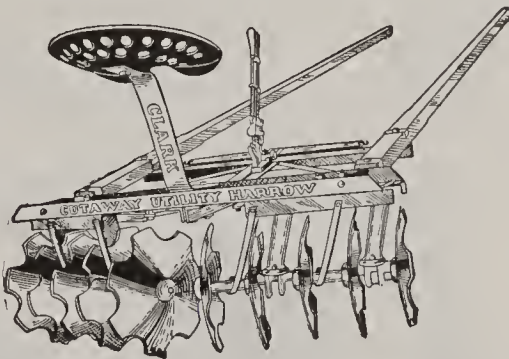
Clark
"CUTAWAY"

Utility One-Horse Harrow

Many farmers need a One-horse Disc Harrow and go without it simply because they cannot find a machine that is fit to use with one horse—most of them are too heavy. The Utility Harrow is one of the five special One-horse Clark "Cutaway" Disc Harrows built expressly to meet one-horse requirements.

The Utility Harrow is ideal for the nurseryman, market-gardener, florist, or general farmer; it is suitable for cultivating small fruit trees, for cultivating berries or for preparing seed-beds. While light and easy to handle, it is very strong and does a good job.

Frame is of angle steel; gangs are reversible; 10 14-inch cutlery steel, forged-edge discs (cutout or solid same price) cutting 4 feet wide. Weight 200 pounds. Price \$37.85.



Clark
"CUTAWAY"

Double-Action Disc Harrow

The Clark "Cutaway" Double-Action Harrow, with its unit rigid main-frame construction, is famous for its light draft and the thorough work it does. All four gangs of discs are attached to the main frame which holds the rear discs so they always cut between the front discs. All the soil over which the machine passes is thoroughly worked and the surface left level.

There is absolutely no need for a tongue truck on this Harrow; the machine is self-supporting and the pole is jointed so there is positively no cumbersome neck-weight. The absence of a tongue truck makes possible a close hitch which further lightens the draft.

Levers are convenient to the driver's seat which is placed at the rear where it should be. Cutout discs are regular equipment but either solid or cutout discs, or any combination of

the two types, will be furnished at the same price.

	Hitch	Width cut	Weight	Price
16	16-in. discs, 2-horse,	4½ ft.	440 lbs.	\$76 50
20	16-in. discs, 3-horse,	5½ ft.	555 lbs.	92 00
24	16-in. discs, 4-horse,	6½ ft.	630 lbs.	102 00

If two-horse hitch is wanted in place of three, or three-horse hitch in place of four, deduct \$1 from the above prices.

Clark
"CUTAWAY"

Flexible Double-Action Tractor Disc Harrow

The Clark "Cutaway" Flexible Tractor Harrow gives all the flexibility that can be desired and at the same time retains many of the valuable and exclusive Clark "Cutaway" features. This is an unusually sturdy Harrow with its heavy angle-steel and channel-steel frame construction. All four gangs are angled by a powerful crank and screw control. The rear section can be quickly removed by taking out two bolts and the front section of the Harrow used alone if desired.

The construction of this Harrow employs the practical over-draft principle which aids penetration and provides clear space in front of the discs with no low projections to catch on obstructions. Cutout discs are regular equipment. Solid discs, or any combination of the two types, will be furnished at the same price. There is also a complete line of rigid-frame Double Action Tractor Harrows in both regular and extra-heavy service models.

No. of Discs	Diam. of Discs	Width of Cut	Weight	Price
20	16 in.	5½ ft.	565 lbs.	\$94 00
24	16 in.	6½ ft.	755 lbs.	114 00
28	16 in.	7½ ft.	860 lbs.	122 00
20	18 in.	5½ ft.	695 lbs.	111 00
24	18 in.	6½ ft.	850 lbs.	123 00
28	18 in.	7½ ft.	950 lbs.	135 00



Heat-Treated Forged-Edge
Discs on all Clark
"Cutaway" Harrows

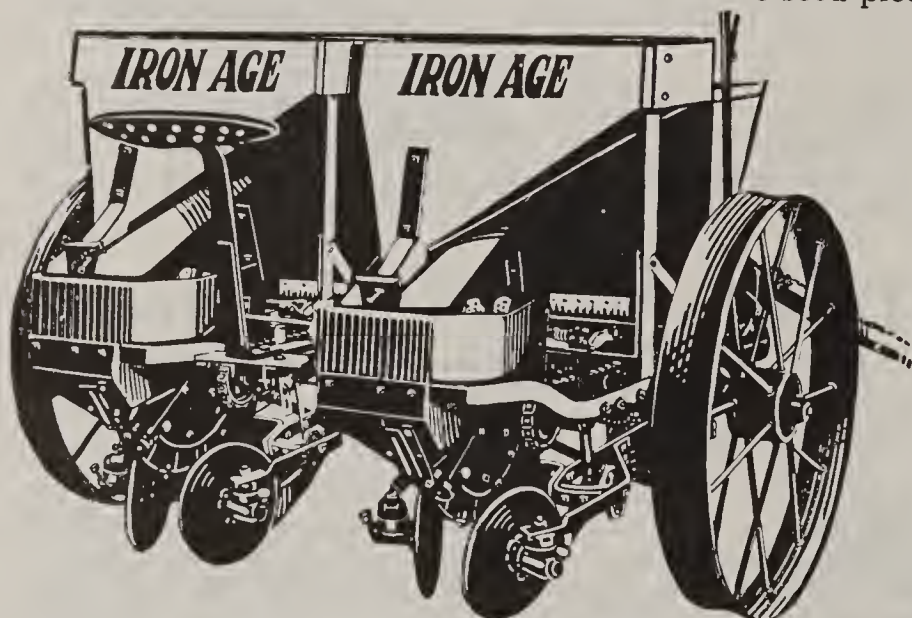
IRON AGE POTATO PLANTERS

*Assisted-Feed or Automatic Feed
One-, Two-, Three-, or Four-Row
Seed Hopper Interchangeable*

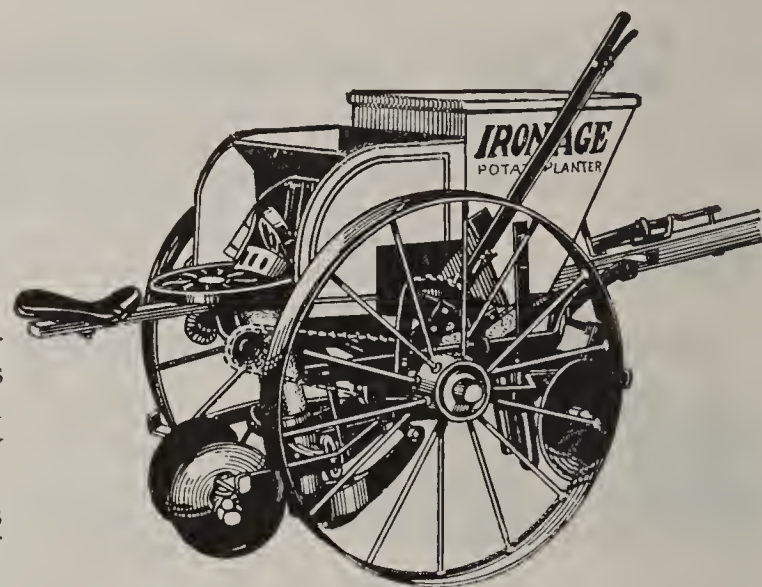
The **Iron Age** Assisted-Feed (two-man) Planter is machine-fed, with hand corrections made by boy or man, and approaches most nearly 100 per cent planting. Recent improvements in adapting the elevator wheels to all sizes of seed have greatly reduced the work of the man on the rear seat.

The **Iron Age** Automatic-Feed Planter has adjustable picks for small, medium, or large seed. Has a very high degree of accuracy in planting—very few misses or doubles, and no bruising of seed. Seed hopper interchangeable with Assisted-Feed Planter. Picker wheel in plain view of driver at all times.

Both types of Planters are built with or without fertilizer attachment. All **Iron Age** Planters are equipped to place the fertilizer in bands 2 inches from the seed-piece, either on the level with it or a little below it. This method has not only proved to be the safest but produces the largest yields.



Iron Age Two-Row Automatic Planter



Iron Age One-Row Assisted-Feed Planter

No. 410R. One-row, Automatic-Feed.....\$158 50

No. 424R. One-row, Assisted-Feed..... 158 50

No. 431R. Two-row, Automatic-Feed..... 323 50

No. 434R. Two-row, Assisted-Feed..... 323 50

Doubletree and Neckyoke, extra if wanted. \$3 65

Tractor Hitch, extra if wanted..... 3 15

Above prices are for Planters equipped with Fertilizer Attachment. For Planters without Fertilizer Attachment, deduct \$36.75 from prices of One-row and \$73.50 from prices of Two-row Planter.

Price of Three-row and Four-row Planters quoted on request.

Before you buy a Potato Planter be sure to see the **Iron Age**. Complete Catalogue on request.

The New Farquhar Potato Digger

*Handiest to operate
and lightest draft
Digger on the
market*

The perfected Farquhar Digger is made in three styles: the Shaker Type, with or without Vine Kicker—a general-purpose Digger; the Extension Elevator Type, where increased separating capacity is desired; and the Continuous Elevator Type, where drop from main elevator is avoided. The Vine Kicker throws the vines between the rows, making it unnecessary for the pickers to handle the vines.

The only Digger built with two levers. One is the depth-regulating lever which, when once set, is not disturbed. The other is used for raising and lowering the Digger at the end of the rows. This lever lifts the fore-truck, giving the effect of a two-wheel cart in turning around. Large master gears, mounted on 27-in. diam. x 3½-in. face ground wheels assure a double and even drive.

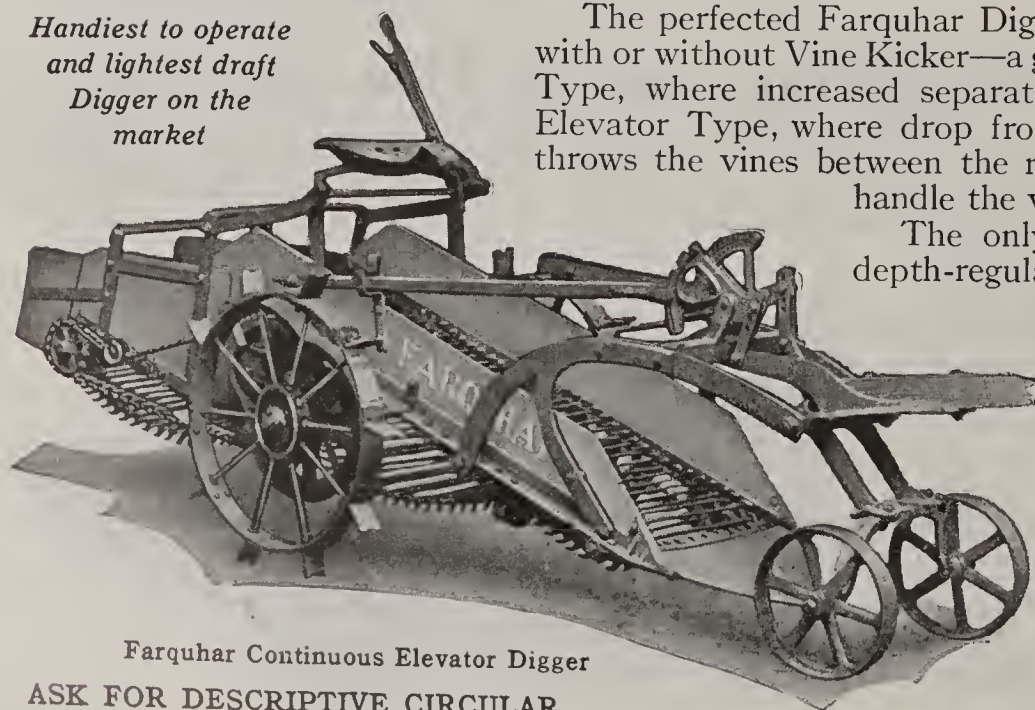
Length of elevator from shovel-point to rear of elevator chain, 6 ft.; width, 22 in.

Shaker Digger without Vine Kicker.\$137 50

Shaker Digger with Vine Kicker.... 152 50

Continuous Elevator Digger..... 147 50

Extension Elevator Digger..... 151 50



Farquhar Continuous Elevator Digger

ASK FOR DESCRIPTIVE CIRCULAR

Peoria Union Combined Grain Drill

The Peoria Drill is a combination Grain and Fertilizer Drill which will handle perfectly all kinds of cereal grain and any kind of fertilizer. The many fine features built into this Drill assure the user the best and most advanced Drill on the market today. The frame is strongly constructed and properly braced to withstand all strain.

Double Run Feed: A large feed wheel extending into the box to assist in agitation of grain, making agitators unnecessary. Also permits the running of the feeds more slowly, giving grain more time to lodge in feed wheel, insuring uniformity and eliminating the danger of cracking and grinding of seed.

Driving and Feed Regulating Device: A multiple gear on the drill axle is used to govern the quantity of grain sown. A sliding pinion mounted on a drive shaft meshes with the different rows of cogs in this multiple gear and, by shifting the indicator, can easily be set at any of the thirteen different changes of speed to permit the sowing of any desired quantity of grain from two pecks to five bushels per acre.

Fertilizer Driving Mechanism: Improved Start Fertilizer Feed. By raising or lowering the indicator, ten different quantities of fertilizer can be sown on any one gear.

Axle Boxings: A long, heavy boxing is used on these drills, which boxing is equipped with a Zerk Fitting and is trouble-free.



PRICES WITH FERTILIZER AND GRASS SEED ATTACHMENTS

Pin Hoe Drills

9 Pin Hoes, 7 inches apart.....	\$140 00
10 Pin Hoes, 7 inches apart.....	147 50
11 Pin Hoes, 7 inches apart.....	157 50

Spring Hoe Drills

9 Spring Hoes, 7 inches apart.....	\$142 50
10 Spring Hoes, 7 inches apart.....	148 50
11 Spring Hoes, 7 inches apart.....	158 00

Single Disc Drills

9 Single Discs, 7 inches apart.....	\$150 00
10 Single Discs, 7 inches apart.....	160 00
11 Single Discs, 7 inches apart.....	167 50

Prices on other sizes quoted on request. Ask for Special Catalogue giving full details

Farquhar "Success Junior" Potato Digger

The Success Junior is the most popular plow-type Potato Digger on the market. Just the Digger for the small grower—in fact, no farmer can afford to be without this Digger, even if he raises only sufficient potatoes for his own consumption.

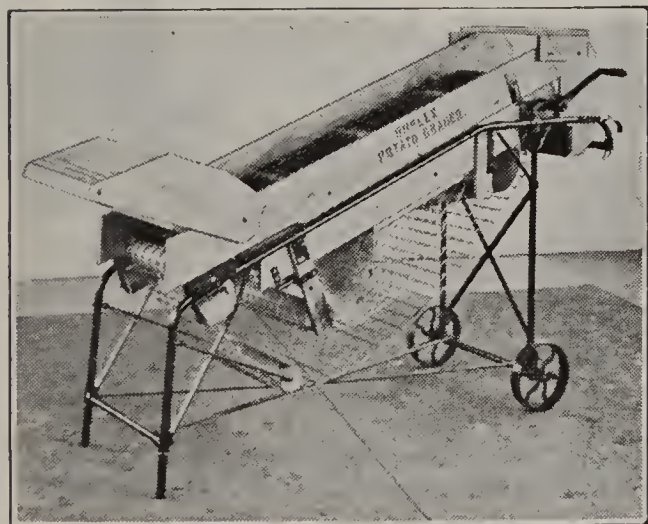
It is simple in design, rugged in construction, is adjustable as to depth, light draft, easily operated and does a clean job of digging.

The weight of the double- and singletrees, together with the pull of the horses, draws the point into the ground, but its depth is regulated by the adjustable wheel at the end of the beam.

The point or shovel enters the ground and the furrow-slice is divided by the breaker; the double moldboard turns each half back over the wings and steel tines. Here the tines permit the soil to pass between them while the potatoes roll back over the end of the fork and remain on top of the ground.

The beam and handles are made from carefully selected and well-seasoned oak. Handles have adjustable braces accommodating themselves to the height and convenience of the operator, assuring easy and complete control.

Price, with single wheel foretruck \$14.25; with double wheel foretruck as shown in illustration, \$16.25.



"Duplex" Potato Grader

The advantage of grading potatoes by machine is now universally recognized. In the "Duplex" we offer a well-designed and substantially built Grader. The main frame is heavy wrought-iron pipe, well balanced and well braced, portable and mounted on wheels.

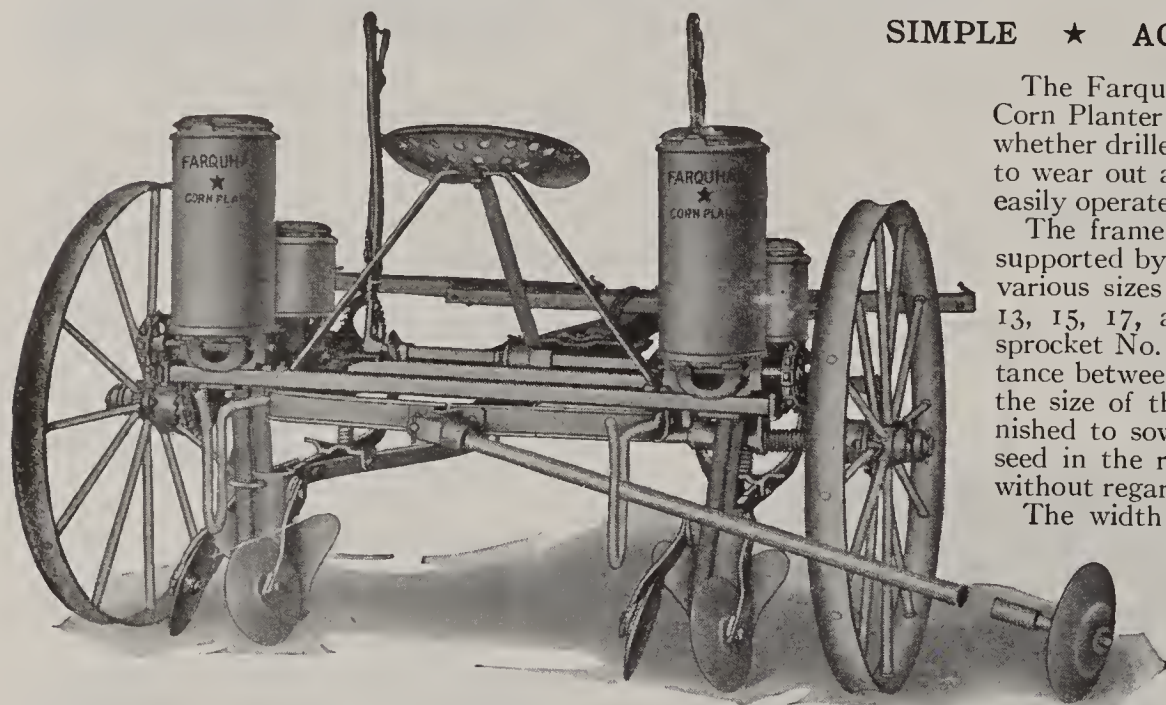
Grading aprons or belts are made to specification when required in regard to size of openings. The standard machine is fitted with grading aprons grading United States standards for both No. 1 and No. 2 sizes. Grading aprons or belts are made of round steel wire absolutely smooth on the grading side and so formed that it will cause the belt to vibrate continuously, thus effecting perfect grading.

Model AA Hand Grader. Grades two sizes and eliminates the culls. Complete with bagging attachment for the No. 1 size. Capacity approximately 150 bus. per hour. \$57.50.

Model A Hand Grader. (Not illustrated.) Same construction and capacity as Model AA Grader but equipped with side elevator with bagging attachment for both the No. 1 and No. 2 sizes. \$65.

Farquhar Star Two-Row Corn Planter

SIMPLE ★ ACCURATE ★ DEPENDABLE



Farquhar Corn Planter with Shovel Opener and Disc Coverer

The Farquhar Star is a simple and very positive drop Corn Planter that produces a most uniform stand of corn, whether drilled or planted in hills. It has no intricate parts to wear out and no fine adjustments to make, hence it is easily operated and has long life.

The frame is strong and made of "I" beam steel and supported by a heavy, round axle. Plates and sprockets of various sizes are furnished to drop a single kernel every 13, 15, 17, and 19 inches. The double-hole plates and sprocket No. 7 drop two kernels every 26 inches. The distance between the hills may be increased in proportion to the size of the sprocket used. Special plates can be furnished to sow other seeds. The Farquhar Star drills the seed in the row but it may be adjusted to drop in hills without regard to checking or cross cultivation.

The width of planting is adjustable and rows may be spaced 39 inches, 42 inches, or 45 inches apart. When set, the runners or openers are rigid and free from all swinging motions. Another feature which makes the Farquhar Star superior is the separate depth adjustment of each opener. Two-row single lever planters operating on steep hillsides have no means of securing uniform depth of planting. But the Far-

quhar Star has a regulating lever for each opener, hence is the ideal planter for both hillside and level ground. Furnished with either double trees and neckyoke regular equipment.

Without Fertilizer attachment.....\$71 50 With Fertilizer attachment.....\$88 00

Above prices are for Planter equipped with either pin shovel furrow-opener or runner furrow-opener. If wanted with spring shovel furrow-opener or disc furrow-opener, add \$4.

Avery New Union Corn Drill

Price, with Fertilizer Attachment, \$26



The Avery New Union Corn Drill plants accurately because the double pitman drive insures positive action all the time. Also because the seed-plates are extra large, giving all the holes plenty of time to fill.

It plants to the right depth because the depth of planting in any kind of soil can be regulated by the adjustable opening shoe in connection with the adjustable clevis.

The frame is all steel which eliminates the use of castings. There are no sprockets to clog up, no chains to break.

The Fertilizer Attachment is gear-driven direct from the main pitman, again eliminating sprockets and chains.

The hoppers are extra large and hinged so they can be thrown back, exposing all the gears, or can be lifted off the frame without using a tool. Planter is regularly furnished with a set of four plates.

Pea and Bean Plates can be furnished at an extra charge of \$1.

Acme Corn Planter with Fertilizer Attachment

Simple—Durable—Economical

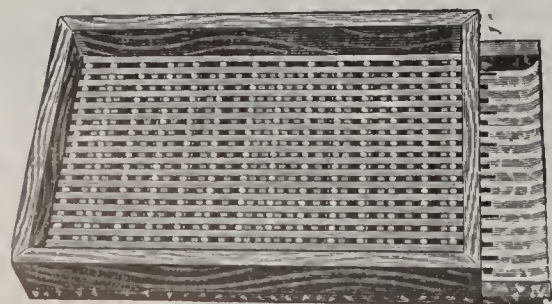
This combination Corn Planter with Fertilizer Attachment is a two-hand slide type with an adjustable segmental slide of pressed steel; the hoppers, hopper bottoms, and conveyor tubes are of steel. The polished steel jaws are arranged to drop corn on each side and a little above the fertilizer or phosphate, which is dropped in the center. Fertilizer drop is regulated to suit the operator. A good tool for hand planting and hand fertilizing at the same time. No. 308. Price \$3, postpaid.



The Eclipse All-Steel Rotary Hand Corn Planter

Acme Planter This Planter is of all-steel construction, but nevertheless light in weight and will last for years. Simple in operation and works easily. Has 4 changeable discs. No. 2. Price \$2.50, postpaid.

Eclipse Planter



Perfection Corn-Grader

A seed Corn-Grader has become a necessity in getting a uniform stand of corn. No planter will drop uniformly unless the seed is graded. Graded seed insures perfect dropping, stronger plants and increases the yield 5 to 15 bushels per acre.

There are four grades of corn on every ear. This Grader sorts them out in one simple operation. It has a guard on the lower screen to prevent the spilling of the corn while grading. Capacity 4 to 6 bushels per hour. Size 11 x 19 inches. Price, \$1. Postage 15 cts. extra.

Thompson's Royal Chain Feed Grass Seeder

14 Feet Long; 32-inch Wheel

This Grass Seeder has won for itself first place among all kinds of Grass Seeders. Most accurate and economical machine for sowing clover, timothy, alfalfa, and other small seeds broadcast. Runs easily, and sows evenly in windy weather. The quantity of seed sown is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. It is instantly thrown out of gear, and the amount of seed sown is quickly governed by changing the pin in the index plate as thereon indicated. Does not injure or bunch the seed, but evenly distributes it the full length of the hopper.

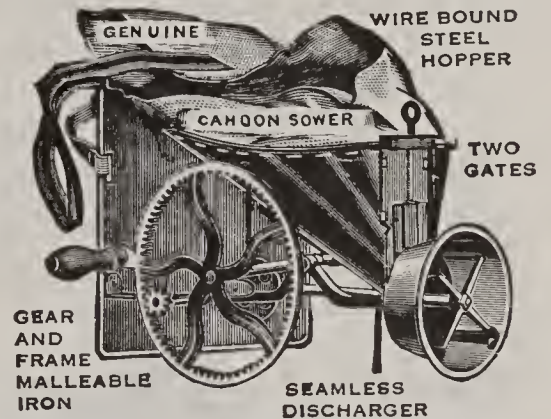
Sows all small seeds like Clover, Timothy, and Alfalfa.
Price \$13.25



THOMPSON NO. 106 WHEELBARROW SEEDER (similar to above Thompson's Royal Chain Feed Grass Seeder) is suitable for sowing lawn seed on a large scale. Gives uniform 10-foot spread; adjustable feed. Weight, 60 pounds. Price \$18.

The Cahoon Seeder

The Cahoon Hand Broadcast Seed Sower, suitable for sowing all kinds of grain and grass seed, is one of the most efficient on the market today. The frame and handle gear are of malleable iron; the shafts of high-grade steel, with the gears securely fastened. The large gate is for grain and the small gate for grass seed; easily adjusted. The Cahoon is speeded so that the crank makes a complete revolution with each step. The bag is of heavy duck and holds about 22 quarts. Price \$5, postpaid.



The Cyclone Seed Sower

This Seed Sower can be used for sowing clover, timothy, lawn grass seed, and all other seeds that can be sown broadcast.

All the working parts are attached to a rigidly built frame of kiln-dried lumber. The Slope Feed-Board gives the seed a gravity flow and always keeps the hopper outlet filled without tilting the machine. The Automatic Feed Adjustment gives a positive force-feed and is quickly adjusted for different seeds. The touch of a lever will start or stop the flow of seed. Seed cannot clog or "rush." The bag holds about 1/2 bushel. Price \$2, postpaid.

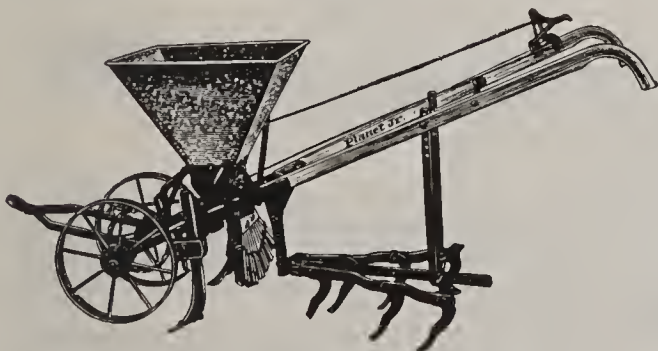


Planet Jr. No. 230A Fertilizer Distributor and Cultivator

Saves Time and Labor—Produces Bigger Crops

A new and highly recommended method of applying fertilizer to growing crops is to distribute it uniformly on the ground between the rows and then to cultivate it thoroughly into the soil. This insures all the feeder roots growing in the middle of the row getting their share of food. It distributes the fertilizer through six adjustable spouts, spreading from 4 to 30 inches on the ground. Cultivator closes to 12 inches and opens to 21 inches. The quantity of fertilizer can be regulated from 200 to 2,000 pounds per acre. It has two wheels and is intended for use with one horse. Capacity of hopper, about 100 lbs. Price \$40.

Planet Jr. No. 220 Fertilizer Distributor. A hand machine similar to the No. 230A illustrated above, except it has a single wheel and does not have the cultivating attachment. Capacity of hopper, 50 lbs. Price \$27.



A Simpler, More Effective
LIME SPREADER

NEW WAY

New Way Lime Spreader

The New Way Spreader provides an easy and convenient way to broadcast lime and all kinds of commercial fertilizer. Hopper is 36 inches wide; fans 22 inches from the ground, spreads one rod wide. Gear driven; each wheel operates independent of the other. Attaches to any wagon or truck in a jiffy. Weight, 200 lbs. Price \$36.

SCOTT'S BETTER SEEDS

The best is always the cheapest in the end. Sow Scott's Seeds for extra profits.

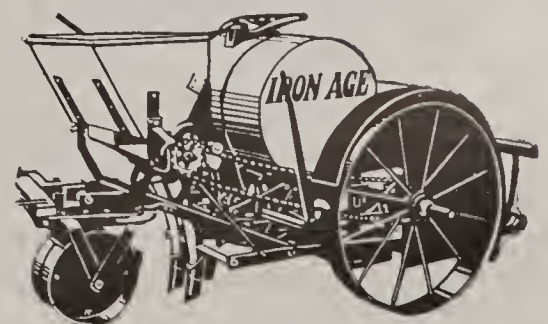
IRON AGE Transplanters

PLAIN-SPACER-CHECK ROW

Set Plants by Positive Action of Plant-Setting Gauge

The Iron Age Transplanter has been designed to meet a demand for an accurate and absolutely reliable plant-setter. It does away with one of the hardest "back-breaking" operations on the farm.

Every plant is watered when set. The Iron Age method of applying water at root of plant, leaving dry soil on top, insures the moisture being retained and prevents baking of soil. Plants may be set during the hottest and driest season.



SPECIAL CIRCULAR AND PRICES ON REQUEST

Seed Drills and Wheel Hoes

No. 3 Planet Jr. Hill and Drill Seeder

Price \$17.50



A favorite among market-gardeners everywhere. Sows accurately practically all vegetable and some flower seeds in drills or hills. The change from drilling to hill-dropping can be made in an instant. Holds 3 quarts of seed. Weight, 33 lbs.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow

Price, complete, \$17.50.

Weight, 37 lbs.

As a Seeder only
(No. 4D) \$13.75

Holds 2½ quarts
of seed



Plants in hills 4, 6, 8, 12, or 24 inches apart. Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily.

No. 4D, Hill and Drill Seeder, same as above less the cultivating attachments, \$13.75.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single-Wheel Hoe, Cultivator, and Plow

Price \$21.50.

Weight, 47 lbs.

Holds 2½ quarts
of seed
Steel Frame



As a Seeder it is practically the same as the Planet Jr. No. 4, and as a Wheel Hoe it has the same steel frames and cultivating attachments as the Planet Jr. No. 12 Double-Wheel Hoe.

Two acres a day can easily be worked, and when it is done it will be a better job than several men could have done in the same time with hand hoes.

Ask for a Planet Jr. Catalogue

No. 300 A Planet Jr. Drill Seeder

Price \$19

Weight, 34 lbs.

Capacity, 4 quarts



15-in.
driving
wheel.
9-in.
concave
rear wheel

The No. 300A Seeder is a very efficient plate Seeder intended primarily for the market-gardener and farmer. Quick, easy, and accurate adjustment for all sizes of seed can be made in an instant. Plates provide 39 different holes through which a patented feed-wheel drops seeds in a steady, even row without crushing or jamming. It has removable hopper for emptying excess seeds.

Iron King Combined Seeder and Fertilizer Drill



A sturdy, well-designed machine, but light enough to be pushed by hand. It handles most small vegetable seeds with considerable accuracy, drilling a small, easily regulated amount of commercial fertilizer in the row under the seed. Built by the makers of Planet Jr. Tools. Weight, 48 lbs. No. 45. Price \$26.50.

Iron Age New Model Seed Drill

For many years this tool has been the favorite seeder with thousands of gardeners.



Will sow all kinds of small vegetable seeds. It has exact regulation of seed-discharge by using an eccentric index or indicator, which adjusts the slide for the seed-opening exactly where you want it.

The flow of seed can be instantly stopped by a swinging cut-off, operated by a cord and ring on the handles. Capacity of hopper 2 quarts. Weight, 50 lbs. Price \$11.50.

No. 17 Planet Jr. Single-Wheel Hoe, Cultivator, Rake, and Plow

Price \$7.50

Steel Frame
15-in. Steel Wheel



Equipment very complete, including one pair of 6-inch hoes for weeding and shallow cultivation, three cultivator teeth for general and deeper cultivation, one plow with land-side for hilling, ridging, and plowing, and one leaf-lifter, which is useful in protecting overhanging leaves and vines. An ideal machine for the family garden.

Planet Jr. No. 16 Single-Wheel Hoe. Same as No. 17 but with one 3-tooth and one 5-tooth rake for fine, close cultivation. Price \$8.50.

No. 11 Planet Jr. Double-Wheel Hoe, Cultivator, Plow, and Rake

Price, with
attachments as
in cut, \$13.25



A Single and Double-Wheel Hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-cultivating tool in the world.

Planet Jr. No. 12 Double and Single-Wheel Hoe. Same as No. 11 but less the rakes and one pair of hoes. Price \$10.50.

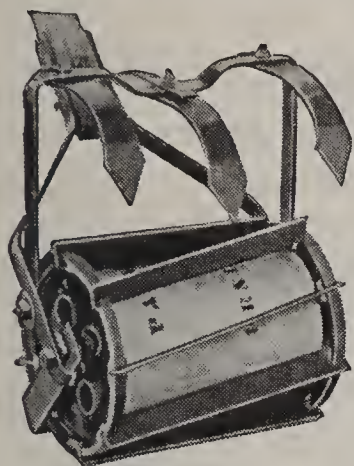
Gem Single-Wheel Hoe and Cultivator

A strong, durable tool that can be used as a Wheel Cultivator anywhere. Equipment consists of a set of 5 slender Cultivator Teeth, one 4-inch and one 8½-inch Scuffle Hoe and a pair of Plows. Weight 28 lbs. (Not illustrated.) Price, complete, \$6.70.

The Planet Jr. Jiffy Hoe

The handiest little Wheel Cultivator ever made for a backyard garden. It weeds and it cultivates. Equipped with 3-prong Rake. (Not illustrated.) Price \$1.60.

For Better Crops and Bigger Yields use Agrico for Gardens, a complete balanced fertilizer. See page 64.



Model D Barker

The Barker Weeder, Mulcher, Cultivator

KILLS WEEDS. CONSERVES MOISTURE

One man with a Barker can do more work, do better work than ten men with hoes. It cultivates and pulverizes the soil, forming a soil-mulch which holds moisture. The underground knife cuts all weed roots, and the reel blades clear the dirt from the knife, making a perfect job of weeding.

The New Model D Barker has 7¼-inch rugged disc wheels; *new patented filler drum*, and oscillating leaf-guards. Cutting parts of best-grade steel for its purpose.

No. 9D. An excellent size for general garden work. It cuts a 9-inch strip. Price, \$7.

No. 10D. Knife cuts a 10-inch strip. A favorite with gardeners and truckers. Price, \$7.50.

Barker Garden Grower. Has open reel, no filler drum. Price, 10-inch cut \$4.75. 6-in. cut \$4.50.

Ask for special descriptive circular

Star Garden Cultivator

AN ADMIRABLE TOOL FOR THE GARDEN

This tool is a universal favorite and it is safe to say that there is no similar one made that in the matter of ease of operation, high-grade material, and fine finish will equal the Star. The frame is made of stiff steel. The long handles give ample foot-space behind the tool and can be raised or lowered to suit the operator's height. The 24-inch wheel has a convex rim which greatly adds to its strength.

The 5-prong Attachment is available separate from the plow and can be used on other of the same general type of garden plows. It cultivates the soil properly and gives the weeds no chance to sprout. No Garden Cultivator is complete without this attachment.

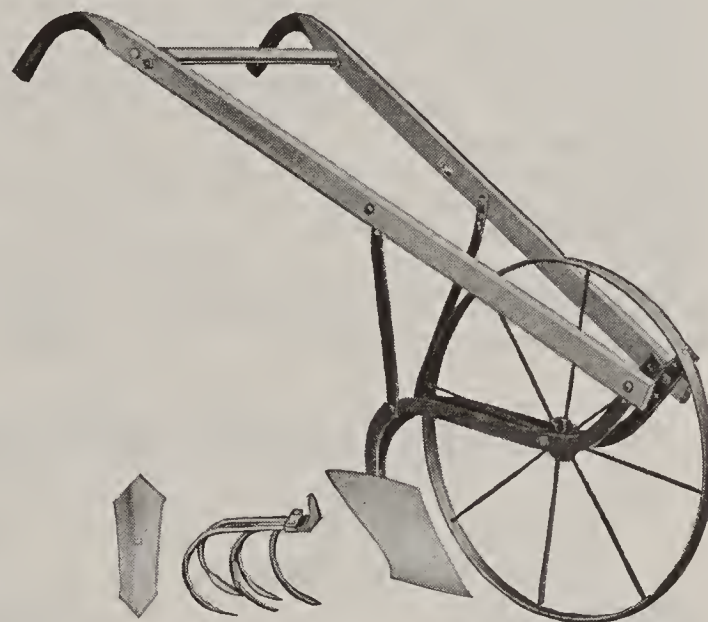
No. 1 Star. With Double-point Blade, Moldboard and 4-prong Attachment. \$3.25.

No. 2 Star. With Double-point Blade, Moldboard, and 5-prong Attachment. \$3.50.

5-prong Attachment alone 70 cts., postpaid 80 cts.

Star Junior Garden Cultivator

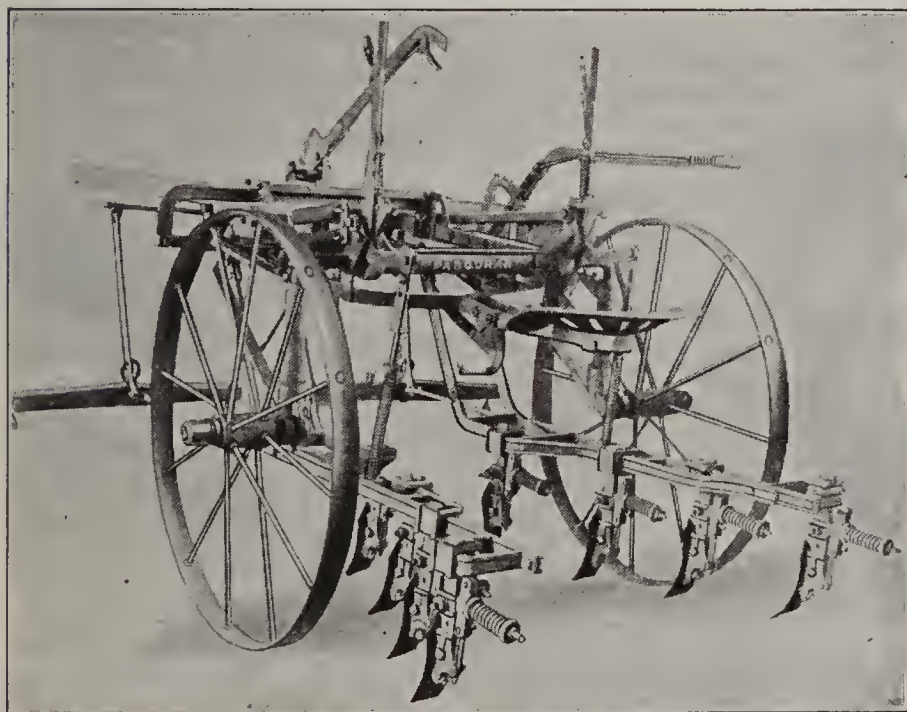
Same type of Cultivator as described above, except wheel is 18 inches in diameter and the handles bolt directly to the wheel axle. (Not illustrated.) Price, with Double-point Blade, Moldboard, and 5-prong Attachment, \$3.



No. 2 Star Garden Cultivator

The Farquhar Riding Cultivator

THE ALL-PURPOSE, ALL-CROP CULTIVATOR



A "farm-tested" tool, embodying superior advantages which make it today's outstanding Cultivator. Costs no more than an ordinary one without these vital superiorities—electrically welded gang and frame, easier draft, easier steering, quick "dodge." Lever-tilted tongue assures even depth whether cultivating up or down hill. Depth levers within easy reach of operator. Gangs are raised by a master lever, which enables depth lever to be retained in position set. Blades are specially tempered alloy steel and are reversible; flat post shovel standards. Unobstructed view of forward gangs from seat while driving. Adjustable seat. Furnished with either pin or spring break shanks. Regularly equipped with fenders. The tread is adjustable to 38-inch, 42-inch, 46-inch, or 50-inch settings. Will effectively cultivate any crop that is planted in rows

30 to 50 inches apart. The wheels are extra strong, 40 inches high, and equipped with dustproof hubs.

No. 156S. 6-shovel; spring-trip. Weight 525 lbs. \$72 75
No. 156P. 6-shovel; pin-trip. Weight 515 lbs. 65 75

No. 158S. 8-shovel; spring-trip. Weight 550 lbs. \$77 50
No. 158P. 8-shovel; pin-trip. Weight 540 lbs. 68 50

PLANET JR. ONE-HORSE CULTIVATORS

Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

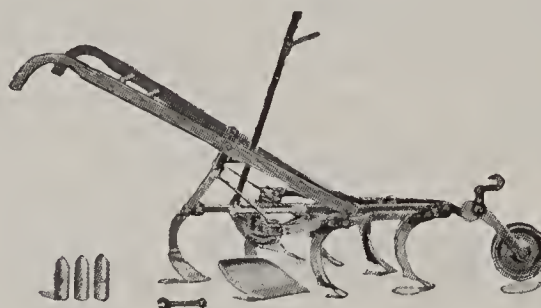


With the Twelve-tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all weeds, stir the soil and fine it as with a garden rake. You widen and narrow as you please between 12 to 32 inches. A favorite with strawberry-growers, market-gardeners, etc.

No. 90. Complete.....\$15 50
No. 90B. Without Pulverizer..... 12 75
No. 90D. Without Pulverizer or
Wheel..... 10 50

We have other sizes and styles of Planet Jr. Cultivators than shown in this Catalogue. Write for a Planet Jr. Catalogue.

No. 82 Planet Jr. Horse Hoe and Cultivator



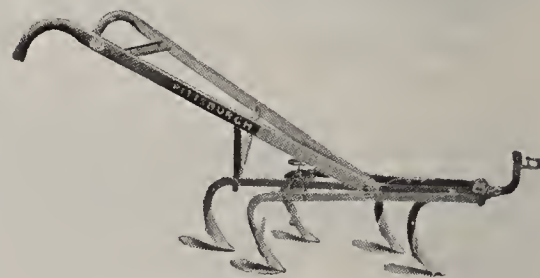
A very popular tool because of the large amount and great variety of work that can be done with it. Finishes rows up to 32 inches apart and works the middle complete at one passage. Zigzag frame is particularly strong and the seven teeth insure fine and thorough cultivation. Price, \$14.25.

No. 83 Plain Cultivator. Same as No. 82, but with 7 cultivator teeth only and without reversible standards. Price, \$12.75.

Pittsburgh One-Horse Cultivators

Pittsburgh Cultivators are made of round-edge steel, and are highly finished. The outside stay braces hold the frame solid to any width it may be set.

Extra care is taken in the "setting" of the shovels to see that they "face" the work properly, have correct "pitch" and are evenly spaced so that they will cut all the ground.



Pittsburgh 5-Tooth Cultivator with Hand-Wheel Adjustment



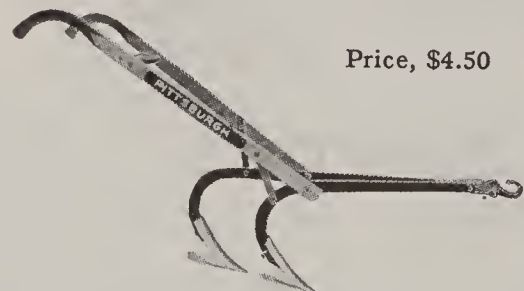
Pittsburgh 7-Tooth Cultivator with Adjusting Lever



Pittsburgh 14-Tooth Cultivator with Adjusting Lever

PITTSBURGH SHOVEL PLOWS

Pittsburgh Steel-Beam Double-Shovel Plow



Price, \$4.50

Shovels have proper pitch for entering ground right, and making steady running Plow. Beams made of solid steel, rolled, tapering at point.

Pittsburgh Steel-Beam Single-Shovel Plow

Adjustable Clevis. Adjustable Handle Braces



A well-finished and highly satisfactory tool

PRICES

With 12-inch Shovel.....\$4 25
With 14-inch Shovel..... 4 50

We have repair parts for all models of Fordson Tractors in stock

Pittsburgh Steel-Beam Triple-Shovel Plow



Price, \$6.25

The Triple-Shovel Plow is an excellent tool for cultivation of corn and potatoes, or anything that is planted in rows, and is adapted to the wants of both the farmer and gardener. By its use the entire surface of the ground is plowed and still left smooth and level.

Pittsburgh Wing-Shovel Plow



For hilling potatoes and other similar work, this tool will be found highly satisfactory. The wings are adjustable by means of the punched straps or braces that support them, and they can be set to any desired angle. Width of main shovel is 12 inches, and with wings extended to limit, it makes a total width of 26 inches. Price, \$5.45.



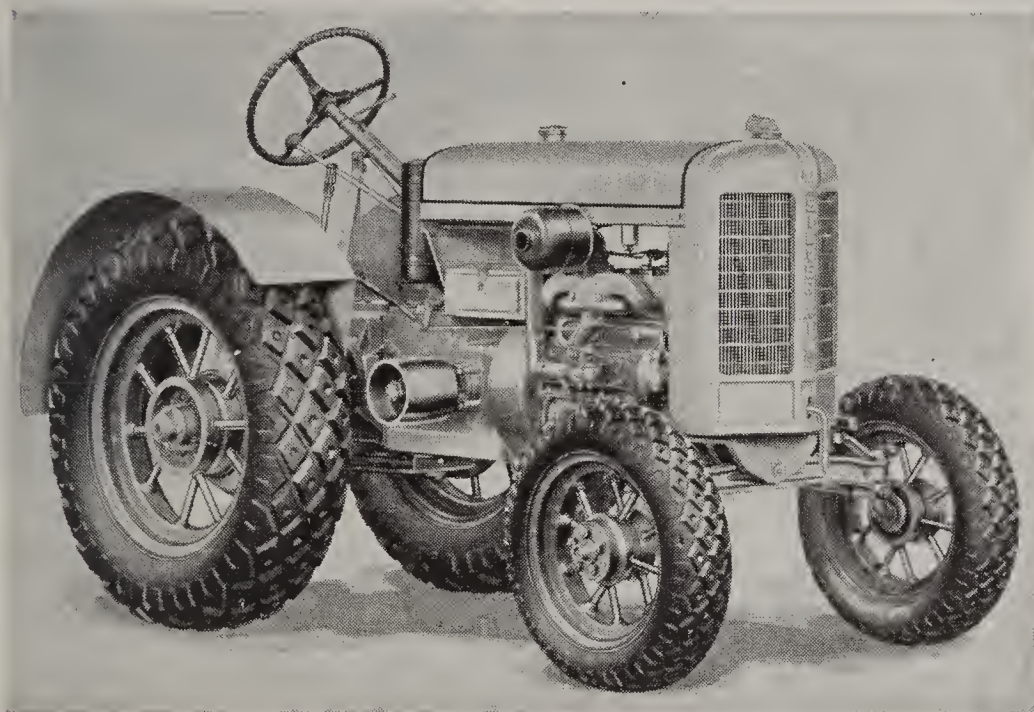
Horse Hoes for 5- and 7-Tooth Cultivators

PRICES

5-Tooth Cultivator with Hand-Wheel Adjustment.....\$6 50
5-Tooth Cultivator with Adjusting Lever..... 7 25
7-Tooth Cultivator with Hand-Wheel Adjustment..... 7 50
7-Tooth Cultivator with Adjusting Lever..... 8 25
14-Tooth Cultivator with Hand-Wheel Adjustment..... 6 65
14-Tooth Cultivator with Adjusting Lever..... 7 40
Gauge Wheel Extra..... 90
Horse Hoes Extra for 5- and 7-Tooth Cultivator..... 1 50

Silver King Tractor

Furnished with Low-Pressure Farm Tires or Steel Wheels



The Silver King Tractor is a light farm Tractor, revolutionary in design, construction, and performance. Here, finally, is a real Tractor—a Tractor that pulls a 14-inch plow in light or heavy soil—a Tractor that is efficient, fast, flexible and rugged—a Tractor that cuts production costs to the minimum and increases profits. The Silver King offers all of the newest improvements in Tractor building—advanced engineering, finer materials, better workmanship, increased capacity, and greater ease of operation.

Pulls trailer at 25 miles per hour. With the 4-speed transmission (2¼, 3.35, 5½, and 25 miles per hour) and low-pressure farm-type tires you can pull a trailer or rubber-tired wagon at a speed of 25 miles per hour. Think what this extra speed means in getting produce to market, in transporting live-stock, in getting from one field to another, from field to barn, and in doing the one hundred and one odd jobs around the farm.

It delivers 10 H. P. on the draw bar and 15 H. P. on the belt. Weight, approximately 2,100 lbs.

It's a different kind of Tractor—this new Silver King. There's nothing experimental about it. It has been thoroughly tested on every type of job over a period of many months. Its basic design is matchless. It has established many all-time records for light Tractor performance and last, but not least, the price will surprise you and please you. Manufactured by The Fate-Root-Heath Company, for 20 years Builders of Plymouth Gasoline Locomotives.

Catalogue more fully describing the Silver King Tractor and price-list on request, or demonstration gladly arranged

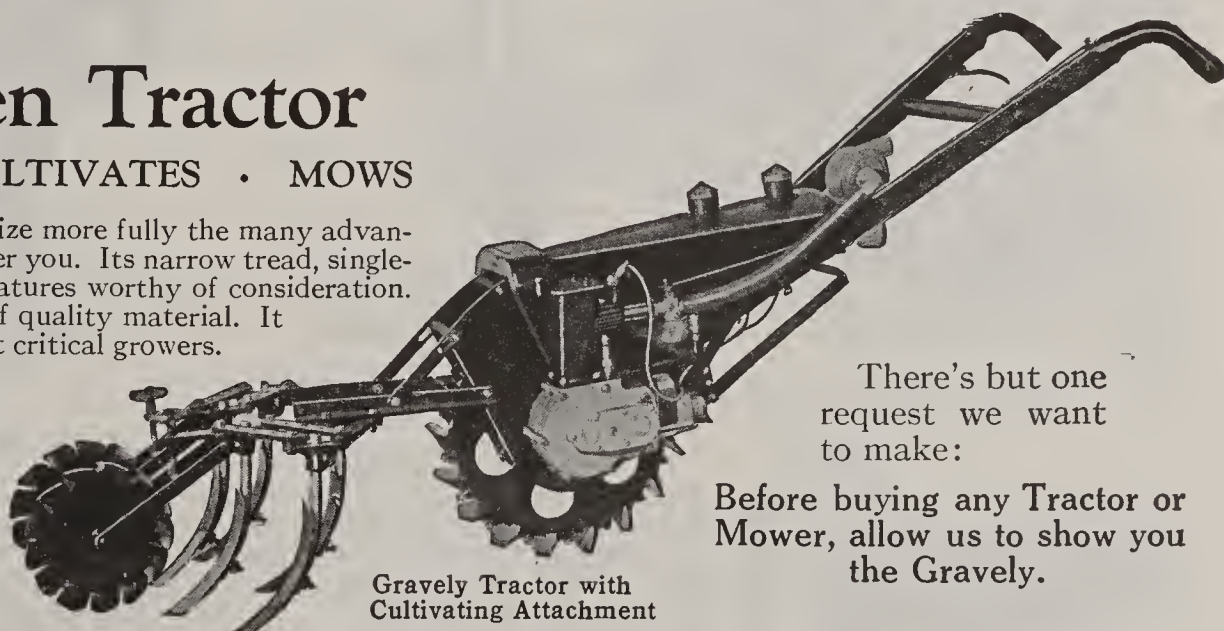
Gravely Garden Tractor

PLOWS • HARROWS • CULTIVATES • MOWS

As each year goes by we are made to realize more fully the many advantages the Gravely Garden Tractor has to offer you. Its narrow tread, single-wheel traction, front-tool hitch, etc., are features worthy of consideration.

The Gravely is designed right and built of quality material. It meets the exacting requirements of the most critical growers.

The Gravely is the only small Tractor on the market today on which the cultivating tools can be used in front. This makes for easier and more accurate guiding. You are naturally looking ahead of you all the time, and without any extra effort can watch both the tools and plants at the same time.



There's but one request we want to make:

Before buying any Tractor or Mower, allow us to show you the Gravely.

Gravely Tractor with Cultivating Attachment

"For mowing it does the work of eight men with scythes. This was by actual test."—Manager of a New Jersey golf course.

"We are pleased to say that the Gravely has proved satisfactory and the machine will do all the manufacturers claim. We have found it very satisfactory."—A Gravely owner.

Gravely Sickle Mower

This consists of the Gravely power unit with a conventional Sickle Mower. The power unit drives both the tractor and the Mower. The Mower has swivel action, allowing the bar to follow the contour of the ground independent of the tractor. For this reason it can be successfully used on hillsides. It is an ideal Power Mower for golf courses, cemeteries, parks, estates, or wherever there is rough cutting to do. The Gravely can also be furnished with rotary type Mower for mowing lawn grass.



Gravely Sickle Mower

CATALOGUE AND PRICE-LIST ON REQUEST

We also sell the Bolens, Planet Jr., and Beeman Garden Tractors. Complete catalogues and price-lists on request

Blizzard Ensilage Cutters



The Blizzard is backed by over 60 years of experience in building Ensilage Cutters. Quality of work, capacity, performance, safety, convenience, and durability are the factors by which the value of an Ensilage Cutter is determined, and the Blizzard meets every one of these requirements. The Blizzard is well known and used and is recommended by all leading farmers.

Space prevents enumerating the many features of the Blizzard. If you are interested in an Ensilage Cutter, write for a Blizzard catalogue which not only fully describes the Cutter but has helpful suggestions on ensilage and silo-filling. Be sure to see the Blizzard before you buy an Ensilage Cutter. **Made in Three Sizes. Prices on Request.**

Buch's Hand Feed-Cutter



A durable Cutter of simple design and low in price. It has an 11-inch, tempered, curved knife, which can be adjusted to take up all wear, thus insuring a perfect shear-cut at all times. Has gauge plate adjustable to any length of cut desired up to 3 inches. Cuts either green or dry fodder. Weight, 50 lbs. **Price \$7.50.**

Ohio No. 8½ Feed-Cutter



No. 8½

The No. 8½ is an excellent Cutter for anyone needing a small, easy-running machine for cutting all kinds of dry or green food for one or a few head of stock. It is well built and reasonably priced. The feed box is 38 inches long and has 25-inch fly-wheel. The framework is of good hardwood mortised, tenoned, and pinned. Has two high-carbon steel knives. The cutter bar is chilled iron and the patented feeding gears and rolls work automatically whether one stalk or an armful is being fed.

Capacity. Cuts one bushel of hay in thirty to forty seconds.

Length of Cut. Cuts ¼-, ½-, ¾-, and 1-inch lengths with two knives or double these lengths with one knife.

Pulley for Power. Choice of 8- or 10- x 3-inch pulley can be supplied. Weight, 175 pounds.

Price, with 2 knives, \$41; Pulley \$2 extra.

The Geneva Feed-Cutter

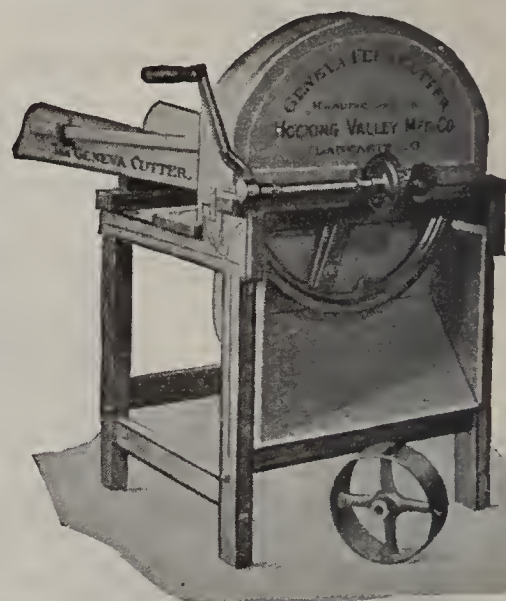
KNIFE ON FLY-WHEEL TYPE

The Geneva is adaptable to all kinds of green or dry roughage, hay, corn-stalks, clover, etc. The frame is of hardwood; bottom rails reinforced with steel rods. Joints are mortised and tenoned. Frame is made triangular, giving it a firm foundation on any surface. The knives are straight, flat, and of the best quality.

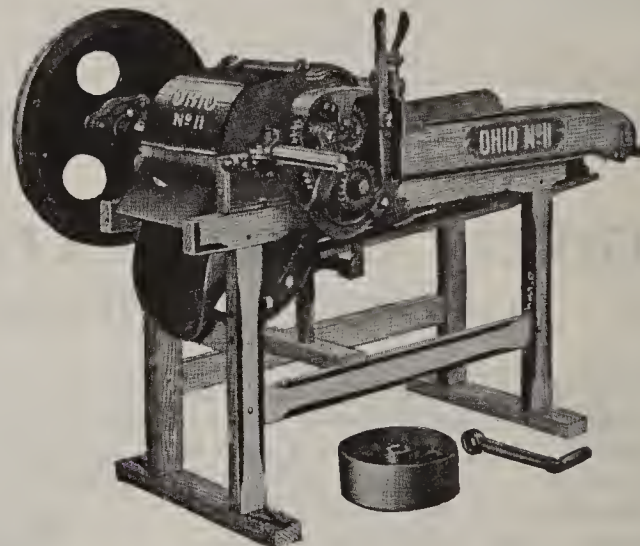
No. 8. Has two 10-inch knives and is intended for hand-use only. It cuts five different lengths, ¼, ½, ¾, 1, and 1¼ inches, and the change can be made quickly. **Price \$50.**

No. 10. Has two 10-inch knives and is intended for both hand and power. It cuts five different lengths, same as No. 8. It is provided with a lever which throws it in and out of gear. **Price, with Crank Attachment and Pulley, \$59.80.**

No. 12. Has two 13-inch knives and is intended for both hand and power. Cuts six different lengths, ¼, ½, ⅝, ⅞, 1, and 1¼ inches. It also has a lever for controlling the rollers. **Price, complete with Pulley, \$69.80.**



No. 10. Geneva Feed-Cutter



Ohio No. 11S Feed-Cutter

Used for cutting all kinds of dry or green roughage, corn-stalks, hay, straw, clover, etc. Has patented feeding device and throw-out lever, heavy well-balanced safety fly-wheel. Frame is mortised, tenoned, and pinned; has wide and well-babbitted bearings. Knives are carefully tempered, high-carbon tool steel. Capacity, 2,500 to 3,000 pounds dry feed per hour and 3 to 4 tons per hour on ensilage. Length of cut, ¼, ½, ¾ and 1 inch. Choice of 6-, 8-, 10-, 12-, or 14- by 4-inch face pulley. Power required, 2 to 4 h.p. gasoline. Weight, 440 pounds.

Price, complete, with 4 knives, \$81.50.

Corn Knives • Corn Hooks • Hay Knives

Little Giant Corn Knife. Curved blade, 18 inches long, highest quality steel. Wood handle, oval grip. **Price 75 cts.**

Black Diamond Corn Knife. Straight blade, 15 inches long, highest quality steel. Flat wood handle. **Price 60 cts.**

Brooks Corn Hook. Adjustable blade, 13 inches long, serrated edge. Handle 18 inches long. **Price 75 cts.**

Ney Hay Knife. Has scalloped sickle-edge knife, 18 inches long. Handle adjustable to suit operator. **Price \$1.85.**

Postage 15 cts. extra



STOVER HAMMER MILLS

Experiments conducted by agricultural experiment stations demonstrate some valuable facts tending to prove that it pays to feed ground grain to live-stock. Every ounce of grain or roughage you place in front of your live-stock that is not in condition to be eagerly consumed and properly digested is steadily taking away from you the price of a Stover Hammer Mill. Your feed-bill is probably one of your most costly items. Reduce that cost and you have turned a loss into a profit.

The Stover Hammer Mills are constructed of the best materials throughout by a company with over 70 years' experience in manufacturing feed-mills. These Mills are all of the same general design and construction; are all adapted for doing identically the same class of work, therefore, the principal difference is in the size, capacity, and power required for operation. All Mills except No. 87 and No. 88 are equipped with grain-hopper and with adjustable slide and feed-auger. All models have cast-iron chills which assist materially in reducing grain and increasing capacities. Cyclone supports are adjustable for wagon-box or stacking discharge; blowers are of heavy cast-iron construction, operated from the main shaft. No. 92 is equipped with traveling feed-table, governor, and feed-regulating gears.

Two screens are regularly furnished with each Mill. Additional screens for finer or coarser grinding furnished at additional cost.

	Power Required	Speed R.P.M.	Width of Feed Opening	Screen Area	Capacity* Shelled Corn	Approx. Weight	Price
No. 87.	5 to 8 HP	2900 to 3200	6 in.	140 sq. in.	800 to 1200 lbs. per hour	300 lbs.	\$90.00
No. 88.	12 to 22 HP	2250 to 2500	8 in.	245 sq. in.	2000 to 3000 lbs. per hour	400 lbs.	\$108.50
No. 91A.	20 to 40 HP	2250 to 2450	10 1/4 in.	320 sq. in.	3000 to 5000 lbs. per hour	575 lbs.	\$140.00
No. 93.	40 HP and up	1900 to 2100	14 in.	520 sq. in.	3400 to 5700 lbs. per hour	1050 lbs.	\$290.00
No. 92.	40 HP and up	1900 to 2100	14 in.	520 sq. in.	3400 to 5700 lbs. per hour	1525 lbs.	\$475.00

*Using 3/16-inch screen. Capacities are always governed by grinding condition of grain and power used. Prices include blower and cyclone and are f.o.b. Factory. Catalogue giving complete details will gladly be sent on request

BOWSHER GRINDING MILLS

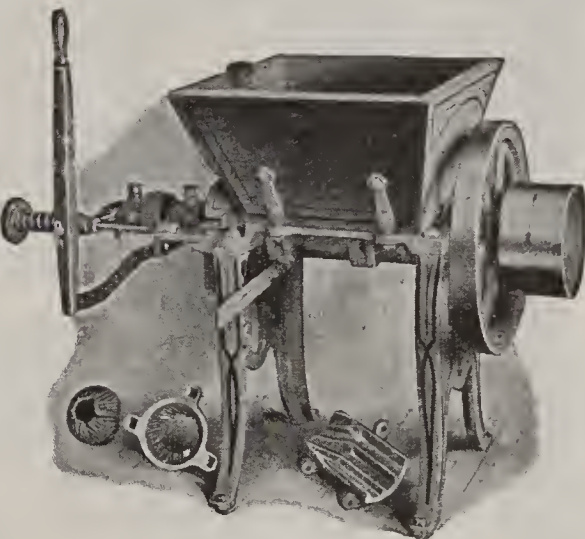
WRITE FOR SPECIAL CATALOGUE

These Mills represent the highest achievement in practical feed-mill construction. Ear-corn can be shoveled into the hopper without fear of bridging or choking, in the sizes designed for that work.

The Cone-shaped Grinders cause very little end-pressure, eliminating chances of hot-boxes, and securing for the Mill many advantages in the way of light-running qualities, large capacity, and economy of operation.

- No. 0. It successfully feeds itself on ear-corn as well as on all kinds of small grain, oats, rye, barley, shelled corn, etc. It is equipped with cone-shaped grinders, the wooden relief lever, and many other advantages of the larger sizes. Capacity, 4 to 12 bushels corn on cob per hour. Power required, 2 to 4 horsepower. Without Elevator, \$36.50; with 3-in. short Elevator, \$51.50.
- No. 4. The No. 4 will grind ear-corn, with or without shucks, and all kinds of small grain, either alone or mixed with ear-corn, in any proportion desired. Equipped with the cone-shaped grinders, wooden relief lever, divided hopper, etc. Capacity, 12 to 30 bushels corn on cob per hour. Power required, 8 to 12 horsepower. Without Elevator, \$80; with 4-in. Elevator, \$108.
- No. 8. Constructed on practically the same principle as the No. 4. Both Mills will handle the same kind of work, but the No. 8 being larger, it has a larger capacity. Capacity, 20 to 50 bushels corn on cob per hour. Power required, 15 to 20 horsepower. Without Elevator, \$120; with 4-in. Elevator, \$148.

For description and prices of smaller Mills, see page 140



No. 0

Harvesting Machinery

Space does not permit detailed description of each machine in this Catalogue. Descriptive catalogue and prices will be gladly sent upon request. The machines we offer are made by old, established manufacturers, are strong and durable and up-to-date in every respect. Be sure to get our prices before you buy. All machines carried in stock. We welcome the opportunity to show them.

- Avery Improved Champion Binders.** This Binder has to its credit an unmatched record for durability, for easy pulling, and for getting the grain. The force-feed elevator, the special balancing sectors, and the relief rake are exclusive features which make this Binder the champion of them all. Made in 6-foot, 7-foot, and 8-foot cut.
- Avery Champion Improved Mowers.** The high standing of the Avery Champion Improved Mower is the result of a century's experience in building better farm implements. Besides being light-draft machines, they are very strong, and easy to operate. Made in 3 1/2-foot cut for 1 horse and 5-foot and 6-foot cut for 2 horses.
- Avery Champion Improved Self-dump Rakes.** Here's a Self-dump Rake you are sure to approve. It is the last word in durability—in convenience—in efficiency. Has an effective locking device and trip found only on the Avery Rake. It is absolutely new in design and principle and is the result of hundreds of experiments and tests. Made in 8-foot, 9-foot, and 10-foot sizes.
- Avery Champion Hay Tedders.** Much of the feeding and market value of the hay crop may be lost between cutting and gathering. To cure evenly there must be a thorough circulation of air all through the hay. The Champion is designed to accomplish this work most effectively and rapidly. Made in 6 and 8-fork sizes.

- Moline Cylinder Hay Loader.** Embodied in the Moline Cylinder Hay Loader are all of the improvements in Loader design. It is durably built and will give years of hard service. Steel parts replace castings; pulleys and wheels have replaceable boxings; the frame is of all-steel construction. These are the features that give long life and service. Furnished in 6-foot size and with fore-carriage.
- The Huber Revolving Hay-Rake.** Made of the best selected hardwood timber thoroughly seasoned. The teeth are square and are framed in the heads perfectly solid, thus making them less liable to come loose and break. 8-foot, 14 teeth, \$16; 9-foot, 16 teeth, \$17.
- Avery Champion Side Delivery Rake and Tedder.** This machine represents all the progress which has been made in the design and construction of up-to-date haying machinery. When used as a Rake the cylinder revolves in the direction in which the rake travels, delivering the hay in light, fluffy windrows on the left-hand side. Shifting the lever reverses the cylinder for tedding.
- Steel Wire Bale Ties.** We make a specialty of furnishing Steel Wire Hay Bale Ties for baling hay, straw, waste paper, etc., to suit all the different sizes and styles of balers. We carry in stock at Pittsburgh for quick shipment the leading sizes of cross-head and single-loop Ties. Prices will be quoted on request.

MYERS HAY TOOLS

Myers Clover Leaf Unloader

Adjustable to Fit All Standard Makes of Steel Track

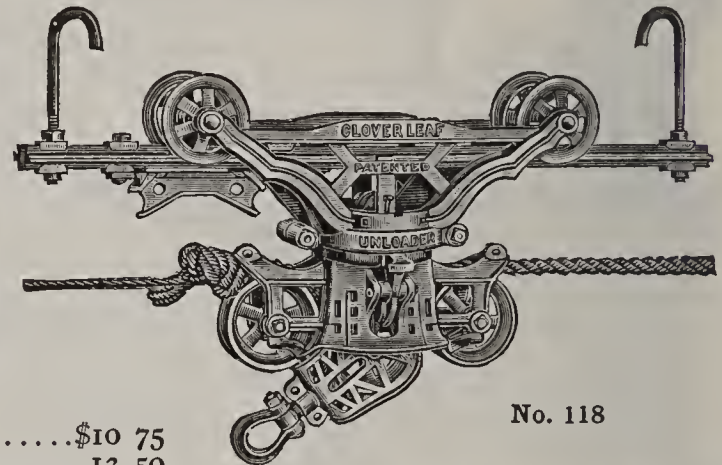
The Myers Clover Leaf Unloader is built of malleable iron throughout. It is heavy and substantially made. Truck is 16 inches long. Has 4-inch sheaves. Track wheels are large and revolve on $\frac{3}{4}$ -inch turned steel axles. Lock is composed of three parts and has no springs. This Unloader has wide-open mouth to receive fork pulley when approaching in any direction. Rope sheaves have longer hub than other Unloaders. Knocker and end stop furnished with each Unloader.



No. 301



No. 302



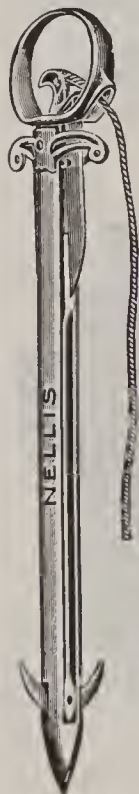
No. 118



No. 824

PRICES

No. 118.	Unloader. Complete as described above.....	\$10 75
No. 126.	Unloader. Heavier construction. Has 7-inch sheaves. Complete.....	13 50
No. 824.	Double Steel Track, as illustrated. Furnished in 6- and 12-foot lengths only. Per foot.....	23
No. 301.	Steel Rafter Brackets, as illustrated. Each.....	05
No. 302.	Steel Track Hanging Hooks, as illustrated. Each.....	18
No. 266.	$\frac{3}{4}$ -inch Floor Hooks. Each.....	18



No. 773

Myers Hay Forks

No. 1314. Myers Double Harpoon Fork. Strong and substantial. The flexible chain instead of a fixed cross-bar permits the Fork to enter the hay to a greater depth. \$3.25.

No. 670. Myers Lock-Lever Double Harpoon Fork. Made extra heavy. Has 50 per cent more capacity than ordinary double harpoon forks. \$6.50.

No. 773. Myers Nellis Single Fork. Constructed of extra-quality material throughout and nicely finished. \$5.

Myers Automatic Grapple Forks. Made of high carbon, heavy spring steel. Closes and locks itself. Trips easily from any direction.

No. 2973. 4-tine Fork \$10.50.

No. 2974. 6-tine Fork \$12.



No. 1314



No. 2974

Myers Pulleys

No. 1120. Has 6-inch wood sheave, 1-inch loose pin, swivel eye. 75 cts. each.

No. 1133. The frame has heavy ribs and swivel eye and follows the rim of the sheave to a point nearly opposite the axle. Has 6-inch hard maple sheave. 65 cts. each.

No. 434. Reed Wood Frame Pulley. Has 1-in. loose pin, self-lubricating wood sheave, with steel hook. 75 cts. each.

No. 466. Not illustrated. Same as No. 434, with swivel eye. 75 cts. each.

No. 1124. Made entirely of malleable iron with iron sheave. This is the Fork Pulley for No. 118 Unloader. \$1.25 each.



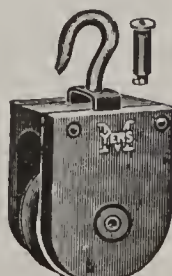
No. 1133



No. 1120



No. 1124

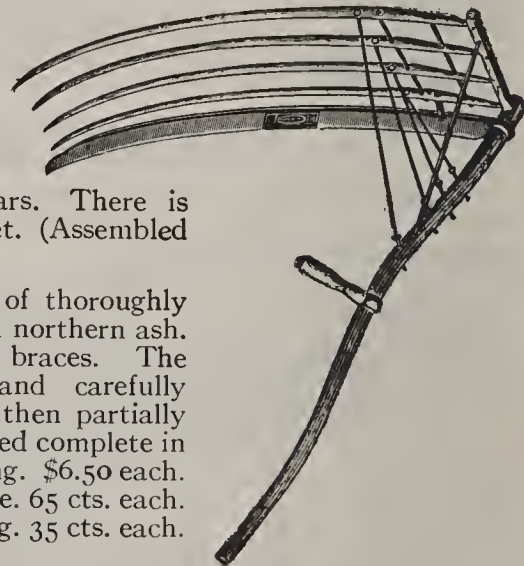


No. 434

Grain Cradles

Westmoreland. The Westmoreland is a hand-made Cradle well known all over western Pennsylvania for many years. There is none better on the market. (Assembled complete.) \$8 each.

Genuine Schwob. Made of thoroughly seasoned, second-growth northern ash. Has adjustable wire braces. The Cradle is assembled and carefully balanced by hand and then partially knocked down and packed complete in strong carton for shipping. \$6.50 each. Extra Fingers, handmade. 65 cts. each. Extra Fingers, oil-sprung. 35 cts. each.



Rope

We handle the best grades of Manila and Sisal Rope; especially adapted for hay-fork outfits and other hard work where a strong, serviceable Rope is required.

H. & A. "Anchor" Manila Rope. Guaranteed to be stronger than Government Standards. It is carefully spun from extra-long, high-grade Manila fiber. It will long outwear ordinary Rope, will resist water and weather, and remain pliable and easy to work with under most adverse conditions.

SIZES AND PRICES PER FOOT

	$\frac{1}{4}$ -in.	$\frac{3}{8}$ -in.	$\frac{1}{2}$ -in.	$\frac{5}{8}$ -in.	$\frac{3}{4}$ -in.	$\frac{7}{8}$ -in.	1-in.
Manila....	$\frac{3}{4}$ c.	1 $\frac{1}{4}$ c.	2c.	4c.	4 $\frac{3}{4}$ c.	6 $\frac{1}{2}$ c.	7 $\frac{3}{4}$ c.
Sisal.....	$\frac{1}{2}$ c.	1c.	1 $\frac{3}{4}$ c.	3c.	3 $\frac{3}{4}$ c.	5c.	6c.

H. & A. "Star Brand" Binder Twine

"Star Brand" Twine is evenly spun from the best fibers, is of full yardage and strength, and is used from coast to coast by farmers who claim it is never cut by insects.

It is guaranteed to have the yardage claimed for it, to have ample strength for binding purposes, and to work satisfactorily in any properly adjusted binder.

We furnish both Sisal and Standard. 500 feet to the pound.

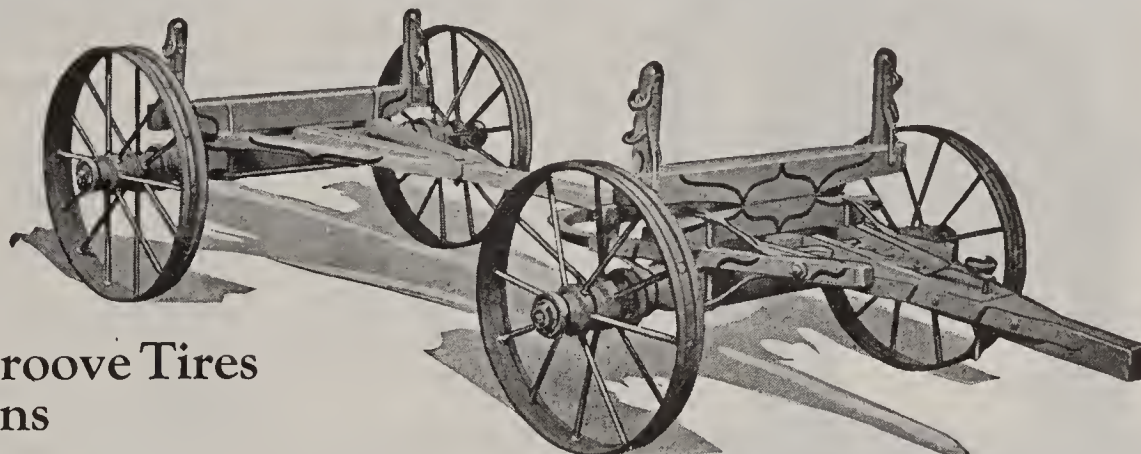
Write for prices, specifying quantity wanted



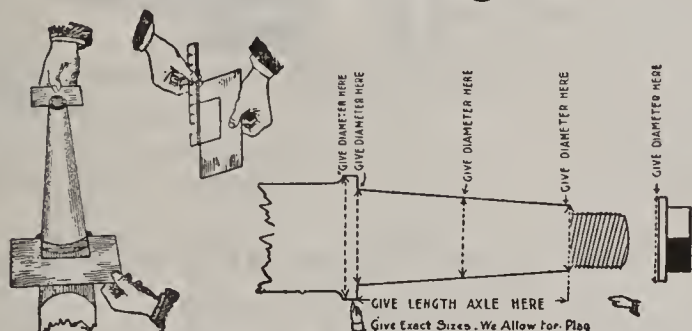
The Keystone Steel Wheel Farm Truck

The Keystone is carefully made of the best material—it is strong, convenient, and handy in every way. Axles are hickory fitted with $3\frac{1}{4}$ x 10-inch cast skeins. Gear parts are clipped, not bolted. Trussed axles. Round angle steel front hound, reinforced and strongly braced. All gear parts, with the exception of the axles, are made of select, thoroughly seasoned oak. Steel wheels are standard pattern with deep grooved tires with spokes staggered and forged solid in both tire and hub. Track 5 feet, center to center of tires. Bolsters 42 inches wide between standards. Standards 10 inches high, mortised into bolster. Wheels, 28-inch front, 32-inch rear, $4 \times \frac{3}{8}$ -inch grooved tire. Capacity, 4,000 pounds, for ordinary farm use.

Price, with gear brake, \$59.50. Double-trees and Neckyoke, extra, \$4. (Brake and Doubletrees not shown in illustration.)



Steel Wheels with Deep Groove Tires to Fit Old Wagons

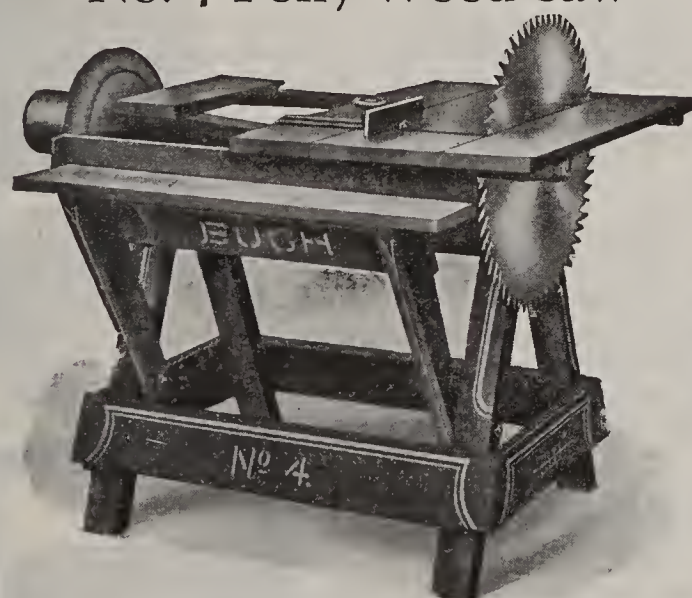


A set of Steel Wheels like those on the Keystone Farm Truck will turn an old wagon into a low, handy farm truck. We can furnish wheels of any height and tire size to fit any skein or axle. Popular heights and tire sizes are quoted below.

3 x $\frac{1}{2}$ -in. or 4 x $\frac{3}{8}$ -in. tire		3 x $\frac{1}{2}$ -in. or 4 x $\frac{3}{8}$ -in. tire	
26 in. height.....	\$4 90	32 in. height.....	\$5 90
28 in. height.....	5 10	34 in. height.....	6 20
30 in. height.....	5 40	36 in. height.....	6 65

Other heights and tire sizes quoted on request. In ordering, give measurements as shown in illustration. Prices are for one wheel and are f.o.b. factory.

No. 4 Pony Wood Saw



No. 4 Wood Saw with Ripping Table

This Saw is especially built for high power. Suitable for 3 to 6 horse-power engine. With 18-inch blade it will cut round wood 8 inches thick. Frame will admit 22-inch blade. Mandrel is 3 feet 5 inches long, $1\frac{7}{16}$ -inch diameter, fitted for blades with $1\frac{3}{8}$ -inch hole. Balance wheel is 12-inch diameter, weighing 30 lbs. Boxes $3\frac{1}{2}$ inches long; pulley, 5-inch face by $4\frac{1}{2}$ -inch diameter. Table securely hinged to frame. Weight 110 lbs. Price, with 18-in. blade, \$16. Ripping Table, as shown, \$4 extra. Catalogue and prices of larger sizes on request.

Clipper Grain and Seed Cleaner

The Clipper has no worthy competitor. The screen outfit is very complete for the work required and contains screens for wheat, oats, barley, rye, clovers, alfalfa, timothy, millet, flax, peas, beans, cowpeas, soy beans, grading seed corn, cleaning clover containing buckhorn, plantain or ripple, cleaning timothy seed containing pepper grass and sorrel, also separating corn from oats.

No. 1-B Clipper is a farm-size hand-mill that will clean 20 bushels of seed wheat per hour, or 10 bushels of clover or timothy seed per hour. Twelve screens, 19 inches wide and $22\frac{1}{4}$ inches long, go with the No. 1-B Mill. Price \$35. Power Pulley, 6-in. diam., \$1 extra.

The No. 2-B Clipper does exactly the same work as the No. 1-B. Its capacity per hour is 25 bushels grain and 15 bushels of grass seed. The screens (12 in number) are 6 inches wider than the No. 1-B screens. No. 2-B can be run easily by hand for cleaning grass seed, but for cleaning grain some kind of power should be applied— $\frac{1}{2}$ horsepower is sufficient. Price, with 6-in. diameter Power Pulley, \$42.



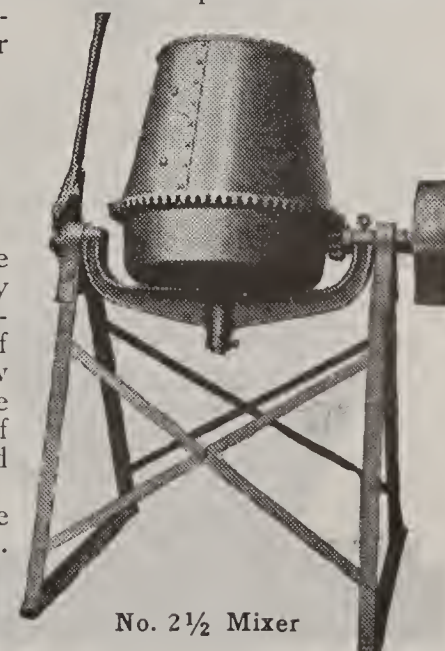
The No. 1-B Clipper Seed Cleaner

The Jumbo Concrete Mixer

Meets the requirements of the farmer or contractor who already has a power plant of one horsepower or over. It has a capacity of $2\frac{1}{2}$ cubic feet (one wheelbarrow load) and can be operated by one man but it will keep a crew of four men busy. It is easy to load and easy to dump.

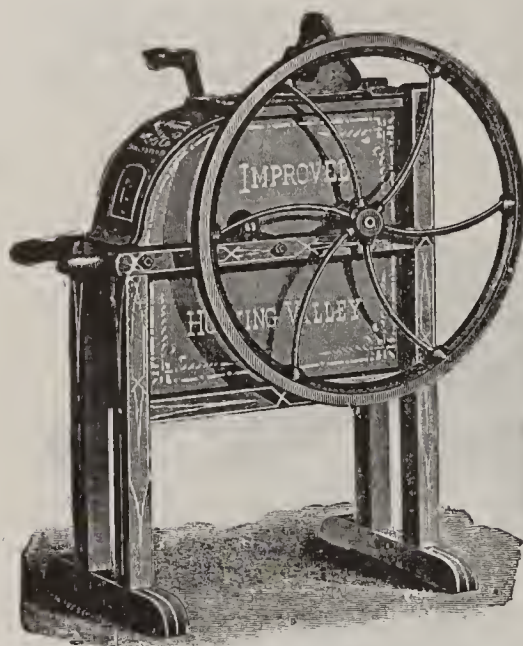
A rugged reliable Mixer for the farmer and contractor. No. $2\frac{1}{2}$. Price \$24.

Prices on larger outfits quoted on request. Ask for special circular



No. $2\frac{1}{2}$ Mixer

Hocking Valley Corn Shellers



Hocking Valley Corn Shellers are manufactured of the best materials obtainable, by skilled workmen. Frames are made of hardwood and are unusually rigid. All bearings bored and reamed to a machine fit. Shelling and feed wheels machine-fitted and keyed to shaft. Every part fits perfectly. Made in two sizes, one-hole and two-hole. Capacity, one-hole Sheller 20 to 25 bushels per hour, two-hole 35 to 40 bushels per hour.

One-Hole Sheller

With fan.....\$18 00
Without fan..... 16 00
Feed-table, extra.. 1 25
Clamp pulley,
extra..... 1 25

Hocking Valley Two-Hole Corn Sheller. With crank, fan, feed-table and pulley, \$39.

Black Hawk Corn Sheller

A wonderfully fast and easy running Sheller. Instantly fastened to barrel or box by two large strong clamps with wing nuts. For illustration, see page 140. Price \$2.75, postage 30 cts. extra.

Banner Root-Cutter



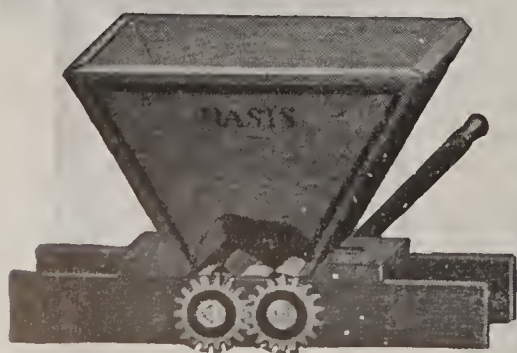
No. 20

100 bushels. Price complete, Pulley and Crank, \$30.

For prices of Root-Cutters for poultry, see page 141

No. 18 Oasis Fruit Crusher

The No. 18 was designed to meet the requirements of the user who needs only a small, low-priced, quality Crusher. It does the work and is well worth the money. Equipped with two six-pointed star-shaped iron rolls 5 inches long. The hopper, made entirely of wood, holds a half bushel, and is made to accommodate a standard size grape-box. It is attached to the wood frame by two small lugs and is easily and quickly removed for cleaning. Price \$5.



Hocking Valley Cider Mills

Equipped with wood-roll grinding cylinder—the most efficient all-purpose grinding device made. Guaranteed to be entirely satisfactory in execution, ease of operation, capacity, durability, and finish. Manufactured from the best materials obtainable by skilled workmen. Bearings bored and reamed to machine fit. All cross rails reinforced with steel tie rods. Hardwood slats riveted at both ends, not nailed. All joints mortised and tenoned. Bottom pressing head mortised, tenoned, and gained. Special Acme Thread, die-cut steel screw. Bearings bolted to side rail. Laminated hardwood cylinder, grain opposed. Crucible steel serrated knives. Mills furnished with plain tubs at prices named.



Bantam Mill. 1 tub....\$21 40	Medium Mill. 2 tubs...\$34 45
Junior Mill. 2 tubs.... 28 60	Senior Mill. 2 tubs.... 49 60

Hocking Valley Cider Mills with Iron Grinding Cylinder

Bantam Mill. 1 tub....\$18 90	Medium Mill. 2 tubs...\$29 45
Junior Mill. 2 tubs.... 25 25	Senior Mill. 2 tubs.... 42 90

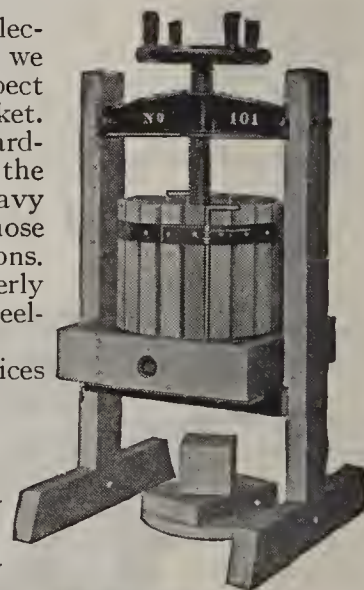
Power Pulley for all Mills except Bantam, \$2.10 extra.

The Oasis Fruit Press

In the design, construction, and selection of materials for the Oasis Presses we offer a product superior in every respect to any hand Fruit Presses on the market. Frames are of selected, well-seasoned hardwood, finished in the natural color of the wood. Cross-heads are made of heavy iron and are much stronger than those used on most Presses of large dimensions. The cylinder has beveled slats, properly spaced and securely riveted to wide steel-hinged bands.

Furnished with hinged tubs at prices named.

No. 101. Tub 11 1/2 x 11 1/4 in. Capacity 1/2 bus. \$9.50.
No. 202. Tub 14 1/4 x 12 1/4 in. Capacity 3/4 bus. \$12.40.
No. 303. Tub 17 3/4 x 15 1/2 in. Capacity 1 1/2 bus. \$20.
No. 404. Tub 23 1/4 x 20 in. Capacity 3 1/2 bus. \$31.



No. 0 Oasis Wooden Fruit Press

FOR USE ON TABLE OR BENCH

The No. 0 Oasis Fruit Press is a small, durable, reasonably priced wooden Press for home use. Frame is made entirely of selected hardwood; cross-head, semi-steel; die-cut steel screw; hardwood tub with extra-wide steel bands and beveled edged slats.

Tub 9 x 9 1/4 in. Capacity about 8 quarts. Price \$4.



Tilley Ladders

They are the most convenient orchard ladders ever produced for trimming trees and picking fruit. Made very light and strong. The best that can be produced.

Single Ladders

OPEN TOP

10-foot.....\$3 25	20-foot.....\$7 00
12-foot..... 3 90	22-foot..... 7 60
14-foot..... 4 50	24-foot..... 9 00
16-foot..... 5 25	26-foot..... 9 75
18-foot..... 6 25	28-foot.....11 75

POINTED TOP

13-foot.....\$5 00	21-foot.....\$8 15.
15-foot..... 5 75	25-foot.....10 10
17-foot..... 6 60	27-foot.....11 00
19-foot..... 7 35	

Point included in above measurement.

Extension Ladders

OPEN TOP

24-foot, extends to 21 feet.....\$10 50
26-foot, extends to 23 feet..... 11 50
28-foot, extends to 25 feet..... 12 25
30-foot, extends to 27 feet..... 13 25
32-foot, extends to 29 feet..... 14 00
34-foot, extends to 31 feet..... 15 00

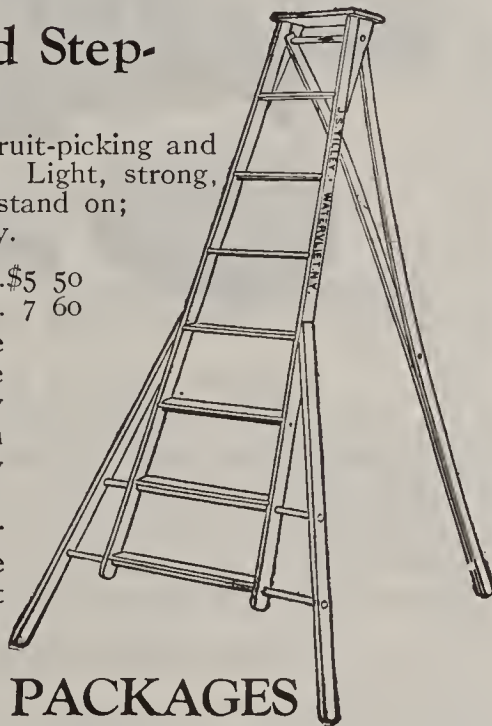
Omega Tripod Step-Ladder

Particularly adapted for fruit-picking and for use on uneven ground. Light, strong, rigid, broad-based. Easy to stand on; easy to move; folds up snugly.

6-step....\$3 35	10-step...\$5 50
8-step.... 4 45	12-step... 7 60

A first-class, well-made article. All flat steps. The two lower are supported by and rest on rounds which tie, support and thoroughly brace the main ladder.

Tilley Ladders are neither painted nor stained and the purchasers can see just what they are buying.



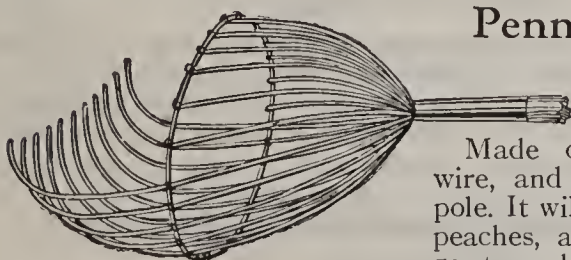
FRUIT PACKAGES

We make a specialty of Fruit Packages, all kinds and sizes to suit the gardening and fruit-growing trade in western Pennsylvania, among which are the following: Berry Baskets, Diamond

Market Baskets, Grape Baskets, Stave Baskets, and Till Baskets. When you are in the market for Baskets, please ask us for prices.



Pennsylvania Fruit-Picker



Made of heavy galvanized wire, and easily adjusted to a pole. It will gather apples, pears, peaches, and all similar fruits. 50 cts. each, postage 10 cts. extra.

Facing Forms, Liners, and Caps

We can furnish Facing Forms, Liners, and Caps used for packing apples and other fruits. Made in half-bushel and bushel sizes. Circular and prices on request.

Owosso Folding Fruit and Vegetable Crate

Made strong and durable. Used extensively for handling apples, potatoes, onions, and tomatoes from the fields; also for storage purposes. They stack up as high as desired and provide the right amount of ventilation.

Size, 15½ inches wide, 17¾ inches long, 13½ inches deep. Holds one heaping bushel. 60 cts. each, prepaid 75 cts.; \$5.25 for 10, \$22 for 50, \$41 per 100, prepaid.



Cyclone Picking Bags

Especially adapted for picking apples and other fruits. Made from "A" grade Duck with two adjustable straps and a steel band to keep the mouth of the Bag wide open. To empty, simply release the rope from the hook and fruit will flow gently from the bottom of the bag. No. 1. \$1.75.

No. 10. Made from heavier material throughout. \$2.25.



ROOFING AND PAINTS

Barrett Everlastic Mineral-Surfaced Roofing

Exceptionally high-grade Roll Roofing for use on steep-roofed buildings of all types. Quickly applied, it makes a weather-tight, durable, fire-safe roof.

Each roll contains 108 square feet, with galvanized nails and cement for proper application. Width of roll, 36 inches. Weight, 90 pounds. Colors: Emerald-Green, Blue-Black, Spanish Red. \$2.75 per roll; 10-roll lots, \$2.65 per roll



Barrett Vitex Mineral-Surfaced Roofing

A Mineral-surfaced Roll Roofing at low cost. Each roll contains 108 square feet, with nails and cement. Width, 36 inches. Weight, 75 pounds. Colors: Red, Green, Blue-Black. \$2.45 per roll; 10-roll lots, \$2.35 per roll.

Barrett Panamoid Smooth-Surfaced Roofing

Made of good-quality felt and saturant, finished with corrugations on both sides. Nails and cement packed with each roll.

Medium (45 lbs.), \$1.70 per roll; Heavy (55 lbs.), \$2.05 per roll; Extra-Heavy (65 lbs.), \$2.45 per roll; 10-roll lots, 10 cts. per roll less.

Barrett Tomahawk Smooth-Surfaced Roofing

Meets the need for a good, low-priced Roll Roofing for general use on buildings and for temporary protection for cement and other building materials. Nails and cement packed with each roll.

Light (35 lbs.), \$1.25 per roll; Medium (45 lbs.), \$1.45 per roll; Heavy (55 lbs.), \$1.70 per roll; 10-roll lots, 10 cts. per roll less.

Sherwin-Williams Liquid Roof Cement

A combination of pitches, oils, and long asbestos fiber for repairing all types of roofs. Apply it with a roofing-brush. Comes in black. Gal. can 75 cts., 5-gal. can \$2.85, 30-gal. drum \$14.40.

Sherwin-Williams Elastic Roof Cement

For patching large holes, joining and relining gutters, downspouts, drain-pipes, chimney flashings, etc. Should be applied with a trowel. Black. Lb. 15 cts., 5 lbs. 55 cts., 10 lbs. \$1.

Sherwin-Williams Commonwealth Barn Paint

For barns, sheds, roofs, silos, fences, etc., a bright red. Works easily; has good spreading capacity. One gallon will cover about 500 square feet one coat. Qt. 60 cts., ½ gal. 95 cts., gal. \$1.65, 5 gals. \$7.75.



The Sterling Grindstone

The Sterling is, beyond question, the best mounted Grindstone on the market. It is strong, easy-running, very substantially made, and cannot fail to give the very best service and satisfaction. It has a double-treadle frame, embracing bicycle features. The frame is of $1\frac{1}{16}$ and $1\frac{1}{4}$ -inch heavy steel tubing, very heavily and securely braced. All rods and bolts are threaded, and there are no cotter pins or other loose parts. Provided with large, comfortable seat and clothes protector. Cranks and crankshaft are fitted with improved ball-bearings, fully encased to keep out dirt. The shaft is cold rolled steel and the shaft bearings are hardened steel, to prevent wear. All castings are malleable iron. Mounted with a Cleveland Stone, 19 to 22 inches diameter, $1\frac{3}{4}$ to $2\frac{1}{4}$ inches thick. \$10.

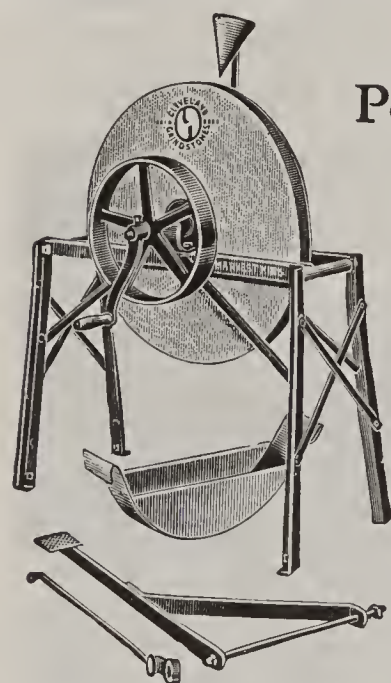


The No. 115 Mounted Grindstone

The No. 115 Mounted Grindstone

A GOOD BALL-BEARING GRINDSTONE AT A POPULAR PRICE

The No. 115 Mounted Grindstone is designed to meet the demand for a low-priced Grindstone. The frame is constructed of 1-inch by $\frac{5}{8}$ -inch angle steel substantially braced, is fitted with ball-bearings on shaft and crank, and a cold rolled-steel shaft which is detachable. It has a double treadle and is furnished with comfortable seat and clothes protector. Mounted with a good Ohio stone, 20 inches diameter, $1\frac{3}{4}$ to 2 inches thick. Weight of stone about 50 pounds. \$6.95.



Harvest King Power Grindstone

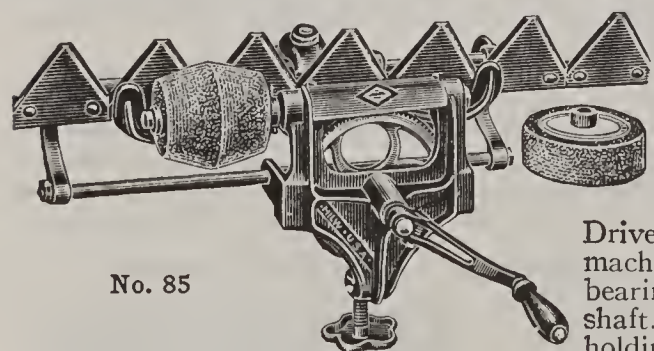
Harvest King Power Grindstone

For Farm Use

The Harvest King Roller-bearing Power Grindstone is designed to meet the needs of the farmer who desires a Grindstone to be operated by a gasoline engine. The frame is of heavy angle-steel, $1\frac{1}{4} \times 1\frac{1}{4} \times \frac{1}{8}$ in., strongly braced. Equipped with high-grade, selected Cleveland Grindstone, 24 inches in diameter and 2 inches thick. Pulley 12 in. diameter x $2\frac{3}{8}$ inches. Heavy steel roller bearings. Weight, complete, about 140 pounds. Shipped knocked down but easily set up in a few minutes. Price, complete, with hand-crank, pulley, drip-cup, trough, and treadle attachment, \$13.50.

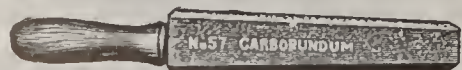
Luther Farm Grinder

Designed especially for the farmer who wants a good quality hand-power sickle and tool-grinder. Substantial construction;



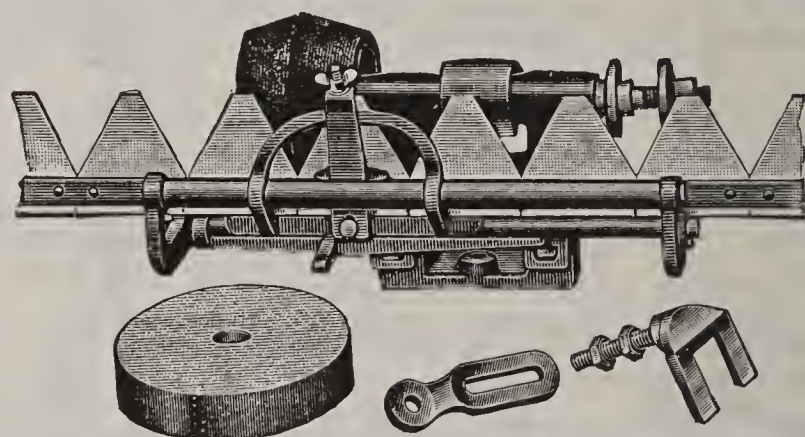
No. 85

ball-bearing thrust eliminates friction and end-play in shaft. Clamps on mower wheel or bench. Drive-gear and pinion machine cut. Ball-bearings on wheel-shaft. Special sickle-holding attachment; easy and simple to grind mower knives. Grinds six sections before reclamping. Holds any length sickle-bar. No. 85. With $4\frac{1}{2} \times 4\frac{1}{2}$ in. Medium Dimeo-Grit Tool-Grinding Wheel \$8.40, postpaid.



Carborundum File

Mighty handy for the farmer and gardener. Cuts quickly and freely, and gives better, cleaner edge than the steel File, and in less time. For sharpening mower sections and practically any edged farm and garden tool. No. 57. \$1, postage 10 cts. extra.



No. 307 Luther Power Grinder

Luther Power Farm Grinder

A sturdy Power Grinder suitable for sharpening farm edge tools, axes, chisels, mower sections, etc. May be driven with $\frac{1}{4}$ h. p. motor or from line shaft. Frame made to run belt from above, below, or the side. Equipment includes one medium 6 x $1\frac{1}{4} \times \frac{5}{8}$ -inch Dimeo-Grit wheel, one $5\frac{1}{2} \times 3\frac{1}{2} \times \frac{5}{8}$ -inch double bevel face sickle cone, and work rest sickle attachment. No. 307. \$9.70. Disc harrow attachment 50 cts. extra.

Luther Foot Power Grinder

An easy-running and portable foot-power Sharpener that adequately takes care of all farm tool sharpening as well as light shop and garage work when belted power is not available. Frame is of all-steel channel construction and strongly braced. (Not illustrated.)

No. 258. With double bevel face sickle cone, one 6 x 1-inch medium grit tool wheel and sickle holder attachment. \$14.

Scythe Stones

Carborundum Brand Scythe Stones. Made in just the right grit to give a proper edge. No. 190. 10 in. long, 25 cts.

No. 191. 12 in. long, 35c. No. 192. 10 in. long (heavy), 30c. English Scythe Stones. Talacre Pattern. 12-in., 50 cts. each.

Baked Milan Scythe Stones. German Pattern. $9\frac{1}{2}$ -in., 10c. each.

Carborundum Brand Lawn Mower Sharpener

Simple, practical, efficient—no need for removing the mower wheels.

No. 41. For mowers 12 to 15 inches wide.....\$0 50

No. 42. For mowers 16 inches in width and wider..... 65

(Any of above by parcel post, 10 cts. each extra.)

POST-HOLE DIGGERS

Standard Earth Augers

Standard Earth Augers are "standard" because they will do the most work in the shortest time with the least labor, and are made of the highest grade material. It is the only Auger made having movable blades which open to discharge contents. Will dump sticky clay with ease. Can be instantly adjusted to bore many different-sized holes. In fact, it has no equal for any kind of earth-boring. It bores seven different-sized holes—8, 9, 10, 11, 12, 13, and 14 inches in diameter and 3½ feet deep. The stem can be fitted with pipe extension to bore extra-deep holes or wells. \$5 each, postpaid.

Universal Post-Hole Digger

The best and most popular Digger on the market. Has high carbon steel blades. Will dig a hole 34 inches deep. Length overall, 4 ft. 10 in. No. 1. \$2.85.

Perfection Post-Hole Digger

Works in all kinds of soil, dry sand, gravel, shale, etc. Blades and shanks forged from one-piece high carbon steel. Handle, 48 in. long. No. 34. \$1.65.

Tamping Head Steel Digger

All-steel, long and wide cutting blade with large tamping head made of 1-inch round steel; length over all 5 feet, 9 inches. \$2.40 each.

Wood-Chopper's Wedge

No. 82. Round head; Truckee Pattern. 3-lb. 45 cts. each; 4-lb. 50 cts.; 5-lb. 60 cts.



Wood Plow Doubletree Set

No. 652. Doubletree 3¼ x 38 inches with ¾-inch steel loops, singletrees 2¾ x 30 inches with ½-inch steel loops. The above set made from second-growth hickory, painted red. Complete \$4.65

Wood Wagon Doubletree

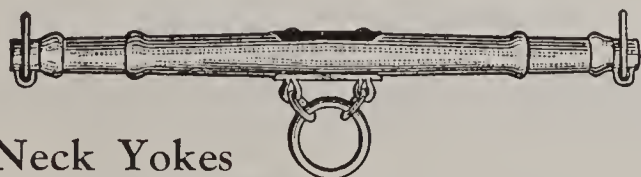
Doubletree 2 x 4 x 48 inches. Singletrees 2½ x 34 inches. Painted red, varnished and striped. (Not illustrated.) No. 710. Per set \$3.50.



Agricultural Set

No. 691. Complete hitch for land-rollers, hay rakes, tedders, mowing machines or any implement where flat doubletree is used. Painted red. Doubletree and singletrees \$1.65.

No. 320 Neck yoke (not illustrated) extra if wanted, 85 cts.

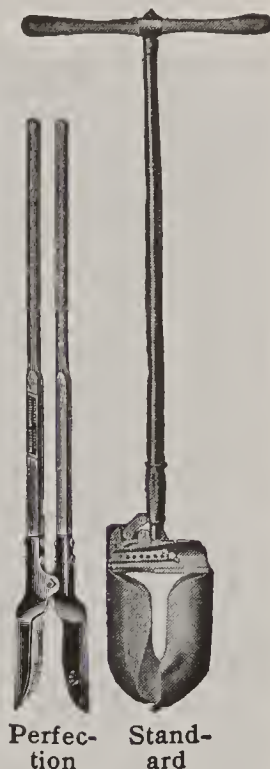


Wagon Neck Yokes

Made from second-growth hickory; center ring 3-inch diameter.

No. 303. 2½-in. x 42 in. long, \$1.50.

No. 305. 3-in. x 48 in. long, \$2.25.



Perfection Standard



Truckee Pattern



Wood Plow and Cultivator Singletree

Full-length loop pattern strap. Ring in center

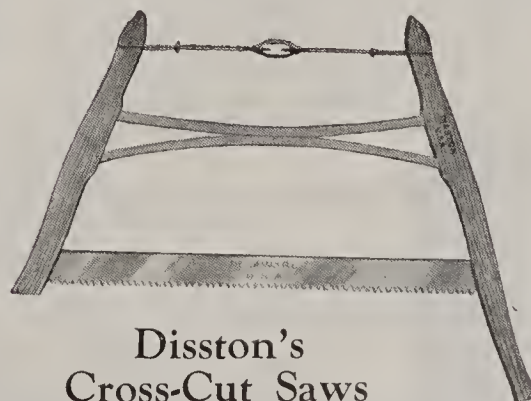
No. 1880.	2¾ x 26-inch.....	\$0 85
No. 1881.	2¾ x 28-inch.....	90
No. 1882.	2¾ x 30-inch.....	95

Breast Yoke

MADE FROM
HICKORY



No. 631. 1¾ inches x 22 inches long, \$1.



Disston's Cross-Cut Saws

No. 254. Two-man. Has two cutting teeth to one raker; width of blade, 3¼ in. Furnished with handles. Price, 5-ft. blade, \$3.25; 5½-ft. blade, \$3.50; 6-ft. blade, \$3.75.

No. 554. One-Man. Has two cutting teeth to one raker. With supplementary handle. Price, 3-ft. blade, \$3.25; 3½-ft. blade, \$3.75.

No. 333. Disston Wood Saw

Hardwood frame, double braced, 30-inch Champion tooth blade. Painted red. \$1.50, postpaid \$1.65.

Fairbanks-Morse New "Z" Gasoline Engines

The New Fairbanks-Morse Self-oiling "Z" Engine is the perfected result of many years of Engine-development. Its simplicity of design, durability of construction, and freedom from usual Engine trouble makes it worthy of your closest consideration.

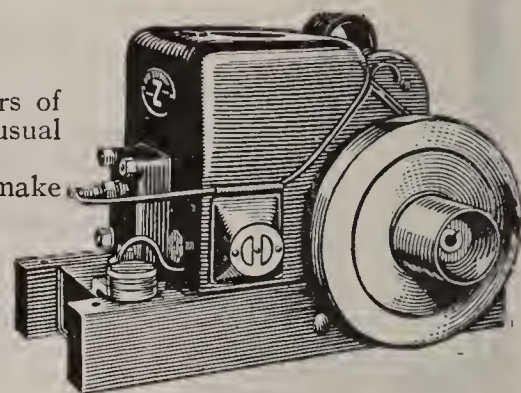
You will find many features that mean economy, power, and longer life, advantages that make the new Self-oiling "Z" Engine do your work more quickly, easily, and at lower cost.

Horse-power	Rated Engine Speed	Standard Diam.	Pulley Face	Shipping Weight	Price
1 1/2	1,500 R. P. M.	3 1/2 in.	3 in.	160 lbs.....	\$59 00
3	800 R. P. M.	6 in.	4 in.	305 lbs.....	93 00
5	600 R. P. M.	10 in.	6 in.	490 lbs.....	125 00
7 1/2	550 R. P. M.	12 in.	6 in.	900 lbs.....	190 00

Fairbanks-Morse Type "R" High-Tension Magneto regular equipment on all sizes.

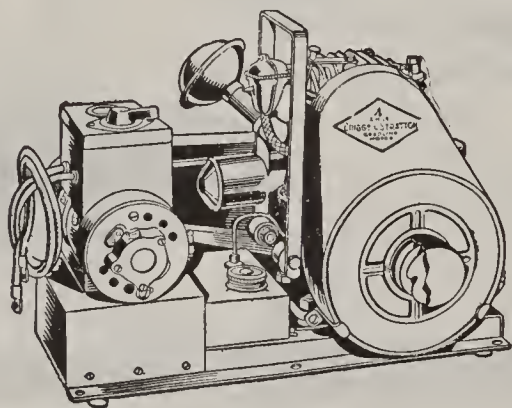
The rated speed of the 1 1/2-H. P. Engine can be reduced to 1,100 r. p. m. by means of the speed-controller on the Engine. The speed of the slow-speed drive-shaft, which operates at half Engine-speed, can similarly be reduced from 750 to 550 r. p. m. When operating below rated speed, the horse-power of the Engine is reduced in direct proportion to the reduction in speed.

The rated speed of the 3-, 5-, and 7 1/2-H. P. sizes can be reduced approximately 100 r. p. m. by means of the speed-controller. Here, likewise, the horse-power delivered is reduced in direct proportion to the decrease in speed. Special Catalogue on request.



1 1/2 Horse-Power Type "Z" Engine

Briggs and Stratton Power Charger



A new, large-capacity generator outfit for use where city electricity is not available. It produces current for dependable 6-volt electric light up to 200 watts and is an ideal outfit for after-dark chores on the farm—for vacationist, campers, or almost any place beyond the reach of city current.

The outfit consists of a Briggs & Stratton 4-cycle, air-cooled gasoline motor and a specially designed generator, with ample overload capacity. Gasoline motor is electrically cranked by turning switch.

A pulley grooved for standard V-belt is provided to drive small equipment, such as washing-machine, pump, grindstone, churn, etc., direct from motor.

It is substantially built with moving parts and wiring fully enclosed. Rubber mounting pads insure vibration-free operation. Measures only 14 inches high, 12 inches wide, and 20 3/4 inches long. Weight, 83 pounds. Equipped with carrying handle. Price, fully equipped, \$59.50.

Ask for Circular

Wood Pumps

Size 6 x 6 in.; 3 1/2-in. cylinder

	Unlined	Porcelain Lined		Unlined	Porcelain Lined
6-ft. . . .	\$8 50	\$11 00	8-ft. . . .	\$10 00	\$12 50
7-ft. . . .	9 25	11 75	10-ft. . .	12 00	14 50

Tubing for above pumps, 4 x 4 in., in 8-, 10-, and 12-foot lengths, 30 cts. per ft.

Couplings for 4 x 4-in. tubing. \$1.

In ordering give depth from top of platform to bottom of well. Prices on other sizes of Wood Pumps quoted on request.



Wood Pump

Iron Pumps

Rex Deep-Well Lift Pump

Our new pattern anti-freezing, constant-flowing Deep-Well Pump, fitted with reversible handle and improved compound handle rest. While the Pump is designed for deep wells, yet it can be used in cisterns or wells as deep as 150 feet. Furnished with either 2 1/2- or 3 x 10-inch cylinders at the following prices:

With iron cylinder	\$9 85
With brass-lined cylinder	11 85
With brass body cylinder	12 85

If wanted complete with 1 1/4-inch galvanized pipe and 3/8-inch galvanized steel rod, add to above prices 22 cents per foot for depth of well.



Rex

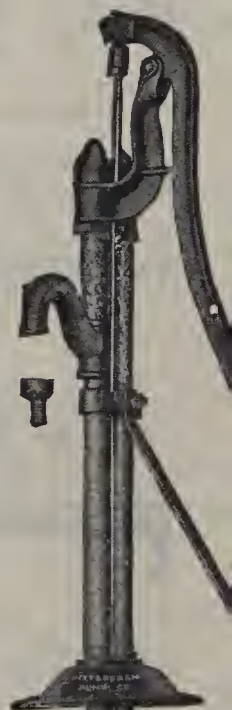
New Fountain Double Acting Force and Lift Pump

The New Fountain is the simplest and most efficient deep-well pump on the market. It has a double air-chamber which enables the pump to throw an absolutely solid stream, just like a hydrant. Has smooth bore cylinder and brass valve seat; made to face the front or side by simply loosening set screw at top. It will go in hole as small as 4 3/4 inches. The upper cylinder is brass lined. Anti-freezing.

Furnished with either 2 1/2- or 3 x 12-inch cylinders at the following prices:

With brass-lined cylinder	\$17 25
With brass body cylinder	18 25

If wanted complete with 1 1/4-inch galvanized pipe and 3/8-inch galvanized steel rod, add to above prices 22 cents per foot for depth of well.



New Fountain

Pitcher Spout Pump

Has smooth-bore cylinder and brass valve seat, with revolving top, allowing lever to be placed at any desired position, and may be used successfully in cisterns or wells as deep as 25 feet.

PRICES

No. 2. 3-inch cylinder, polished iron, \$2.25; brass lined, \$3.75.
No. 3. 3 1/2-inch cylinder, polished iron, \$2.50; brass lined, \$4.25.
Galvanized Pipe. 1 1/4-inch, cut to length and threaded, 17 cts. per ft.

Roper Piston Shallow-Well System

For lifting water 22 feet vertically and at least 1,000 feet horizontally

Compare this new Roper double-acting, single-cylinder Piston System with any other on the market. Nowhere can you get a "direct-drive" piston system at such a low price. Where can you get a storage-tank that is porcelain enameled or that can be washed out? Can you get another system with valves that seat on glass? No! and neither can you get one with all parts enclosed as is the Roper's—even the motor and switch are built-in—yet all are easily accessible. Vibration is eliminated because internal working parts are perfectly balanced. Three-point base support makes installation easy. Quietness of operation rivals modern refrigerators. Insure customer satisfaction—sell Roper!

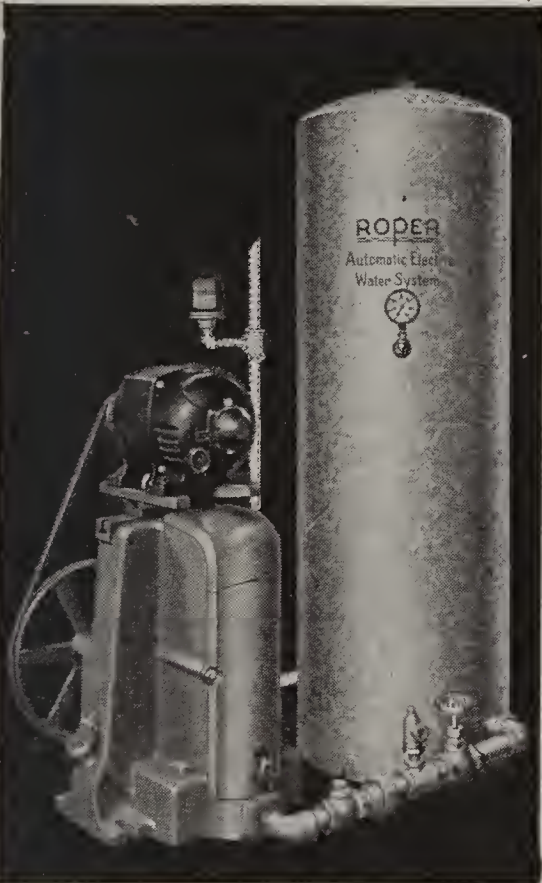
Fig. 1250A (illustrated at right) is a complete System, ready to install wherever a constant supply of fresh, cold water is desired. Entirely automatic—starts and stops itself. Delivers 250 gallons per hour.

Fig. 1350A. Same as illustrated at right but delivers 350 gallons per hour.

Figure No.	Inlet Opening	Outlet Opening	Motor Size	Tank Capacity	Floor Space	Shpg. Wt. Lbs.	Price
1250A	3/4 in.	1/2 in.	1/4 H.P.	10 gals.	18x18x30 in. high	125	\$57.25
1350A	3/4 in.	1/2 in.	1/3 H.P.	10 gals.	18x20x30 in. high	130	67.95

Larger capacity storage tanks can be furnished. Prices and specifications on request.

Complete Catalogue of Roper Water Systems on Request



Roper Deep Well Systems

For pumping water where depth to lowest level is 220 feet or less

This heavy-duty, 6-inch stroke, Deep Well Water System was especially designed for suburban homes, live-stock farms, country estates, etc.

The outfit is complete and fully automatic in operation. All working parts enclosed and run in a constant bath of oil. Equipped with pump, power unit, pressure switch or circuit breaker, storage tank, air-volume control, relief valve, check-valve, and all necessary pipe fittings between pump and tank, as illustrated.

Fig. No.	Inlet Opening	Outlet Opening	Size Motor	Size Engine	Size Tank Gals.	Shpg. Wt. Lbs.	Price
1192M	3 in.	1 1/4 in.				160	\$55.50
1192-1/2MTA	3 in.	1 1/4 in.	1/2 H.P.		42	337	117.00
1192-3/4MTA	3 in.	1 1/4 in.	3/4 H.P.		42	347	128.50
1192-1MTA	3 in.	1 1/4 in.	1 H.P.		42	357	150.00
1192-1/2ETA	3 in.	1 1/4 in.		1/2 H.P.	300	765	192.50
1192-1ETA	3 in.	1 1/4 in.		1 H.P.	300	779	234.50

H.P. REQUIRED TO OPERATE FIG. 1192. 40 lbs. tank pressure. 50 strokes per minute

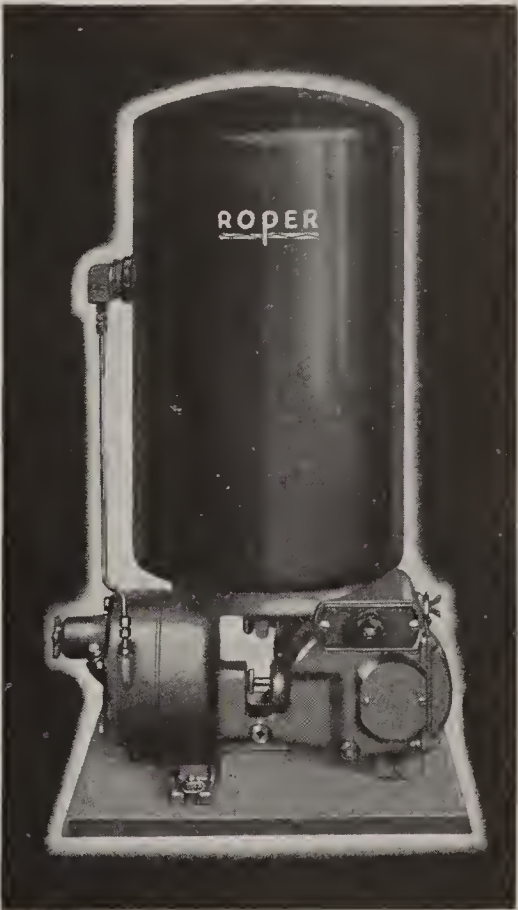
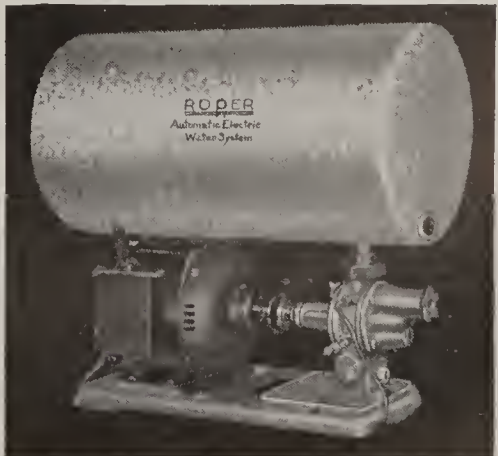
Diam. Cyl.	Gals. Per Hour	Maximum Depth to Lowest Water Level		
		1/2 H.P. Motor or 1/2 H.P. Engine	3/4 H.P. Motor or 1 H.P. Engine	1 H.P. Motor or 1 H.P. Engine
1 1/8 in.	180	125 ft.	200 ft.	220 ft.
2 1/4 in.	285	50 ft.	100 ft.	150 ft.
2 1/2 in.	360		75 ft.	125 ft.
2 3/4 in.	440		35 ft.	100 ft.
3 in.	525			50 ft.

Roper Rotary Shallow-Well System

Not Recommended for Sandy Wells

For reliable pumping service from cisterns and open wells, this System can't be beat! It is a compact, efficient unit that will give you years of Dependable service. Completely automatic—starts and stops itself. Equipped as illustrated—ready to install. Will lift water 22 feet and force it under pressure to all outlets. Made in two sizes—250- and 500-gallon per hour capacity.

Fig. No.	Capacity Gals. Per Hour	Inlet Opening	Outlet Opening	Size Motor	Tank Size Gals.	Shpg. Wt. Lbs.	Price
880	250	3/4 in.	1/2 in.	1/4 H.P.	6	74	\$40.25
881	500	1 in.	3/4 in.	1/2 H.P.	10	115	73.50
880TA	250	3/4 in.	1/2 in.	1/4 H.P.	42	153	55.00
881TA	500	1 in.	3/4 in.	1/2 H.P.	42	173	92.00



The Favorite Barrel Churn



Made of the best quality of white oak, thoroughly seasoned and kiln-dried, having galvanized iron rim in head, making it as strong as a barrel with two solid heads.

The frame is substantially built and made of hard wood.

It works easily and is cleaned quickly, having no dashers or paddles. The churning is done by revolving the Churn, which agitates the cream and separates the butter from the milk.

The churning capacity of these Churns is about half their total capacity.

	Total Capacity	Price
No. 0.	6 gallons	\$8 00
No. 1.	10 gallons	9 00
No. 2.	15 gallons	10 00

	Total Capacity	Price
No. 3.	20 gallons	\$12 00
No. 4.	25 gallons	14 00
No. 5.	35 gallons	16 00
No. 6.	50 gallons	30 00
No. 7.	60 gallons	34 00
No. 8.	80 gallons	40 00
No. 9.	100 gallons	48 00

Frames included at above prices for all sizes up to and including No. 5. Frames for larger sizes, \$4.50 extra. The larger sizes are often hung between two upright posts instead of a portable frame.

These Churns can be furnished with power pulleys. Price of pulleys on request.

Taylor Electric Barrel Churn

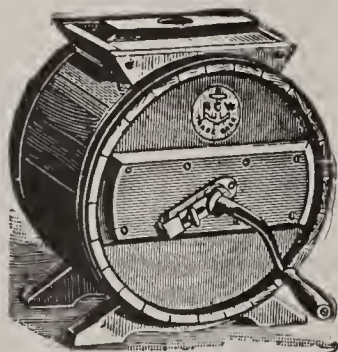
The Taylor is constructed of selected oak; the frame is of hardwood reinforced with metal braces and equipped with metal bearings. Standard, heavy-duty, splash-proof type, 110-volt A.C. motor, complete with cord and plug and V-type belting.

No.	Total Capacity	Churning Capacity	Price
10.	10	5	\$40 00
15.	15	7½	45 00
20.	20	10	47 50

No.	Total Capacity	Churning Capacity	Price
25.	25	12½	\$55 00
35.	35	17½	67 50
50.	50	25	90 00

Improved Cedar Cylinder Churn

Our Improved White Cedar Cylinder Churn has a double dasher, and the crank is locked to the Churn with a clamp and thumb screw, which prevents leakage. Lock cannot break. The top is large, and dasher easily removed. Hoops are of galvanized iron and will not rust. The best Churn in use. All castings are heavily tinned. Churning capacity is given—actual capacity of Churn is slightly more.



No.	Churning Capacity	Price
No. 1.	3 gallons	\$4 00
No. 2.	4 gallons	4 75

No.	Churning Capacity	Price
No. 3.	7 gallons	\$5 50
No. 4.	10 gallons	6 25

B-K Concentrated Sodium Hypochlorite

Sterilizer • Dairy Disinfectant • Deodorant

Easy and economical to use—no acid—no oil—Deodorant—leaves no odor of itself. Kills bacteria on milk utensils. Cans, pails, and strainers contribute 85 per cent of the bacteria in milk. B-K kills 95 per cent of these bacteria.

Ideal Farm Disinfectant. Kills germs—helps prevent and control calf-scours, retained afterbirth, and other diseases.

POWDER		LIQUID	
Small bottle	\$0 75	4-oz. bottle	\$0 30
Large bottle	1 50	10-oz. bottle	50
		1-qt. bottle	90
		1-gal. bottle	\$2 00
		5-gal. jug	8 50

White Cedar Staff Churns

Our popular Staff and Dash Churns are made of selected, seasoned Virginia white cedar, and are bound with electric welded galvanized wire hoops. Fitted with handsome covers and hardwood staffs and dashers. Carefully made, sweet, hygienic, and very light. Measurement given is height of Churn.

Churning Capacity	Price
16-in. 3 gallons	\$1 60
18-in. 4 gallons	1 75
20-in. 5 gallons	2 10
22-in. 6 gallons	2 40
24-in. 8 gallons	3 10
26-in. 10 gallons	3 50



Standard Glass Churns



You can make butter for home use in from 8 to 10 minutes. Easy to clean. Also used extensively for mixing cake ingredients, beating eggs, whipping cream, and mixing salad dressing. The scientific construction of the 4-blade hardwood dasher, giving a rotary motion to the cream against the square sides of the Churn, is what makes it the best Churn ever made. Extra jars for Glass Churns can be furnished.

	Postpaid
2-quart	\$1 50 \$1 70
4-quart	2 50 2 75
6-quart	3 00 3 25
8-quart	3 75 4 05

Osborn Dairy Brushes

Hand Bottle Brushes

No. 86. Prepared stiff bristle, 2¾-in. diam., 6 in. long; handle 9¾ in. long; wire-wound. 85 cts., doz. \$9.

No. 72. Black China bristle. Same size as No. 86. 60 cts., doz. \$6.50.

No. 124. Stiff horse hair, 2¾-in. diam., 6¾ in. long; handle 9 in. long; wire-wound. 65 cts., doz. \$7.

For Machine Washer

No. 125. Turbine. 60 cts., doz. \$6.50.

No. 100. Center Brush for cleaning outside of bottles. \$1.

No. 101. Outside Brushes for cleaning inside of bottles. 65 cts. Complete Set of 3 Brushes, \$2.10.

Palmetto Milk Can Brush

No. 08. Palmetto fibre; width of face 5 in., length of face 9½ in.; solid block. Made of an excellent grade of durable fibre, very full, with flaring wings. 55 cts., doz. \$6.

Cotton Discs

Plain Discs, 6-in. diameter, package of 100, 30 cts.; package of 300, 85 cts.

Thread-faced Discs, 6-in. diameter, package of 100, 55 cts.; package of 300, \$1.55.

Postage 10 cts. extra on packages of 300

Other Dairy Equipment and Supplies

Cream Separators
Milk Coolers
Milk Cans
Milk Bottles
Milk Bottle Caps
Strainers
Milk Testers
Scales
Butter Moulds

Cattle Instruments
Dehorers
Bull Staffs
Bull Rings
Dairy Barn Equipment
Bottle Fillers & Cappers
Bottle Cases
Milk Bottle Baskets
Remedies

Space does not permit showing our complete line of Dairy Equipment and Supplies. Circulars and prices of any of the above sent on request.

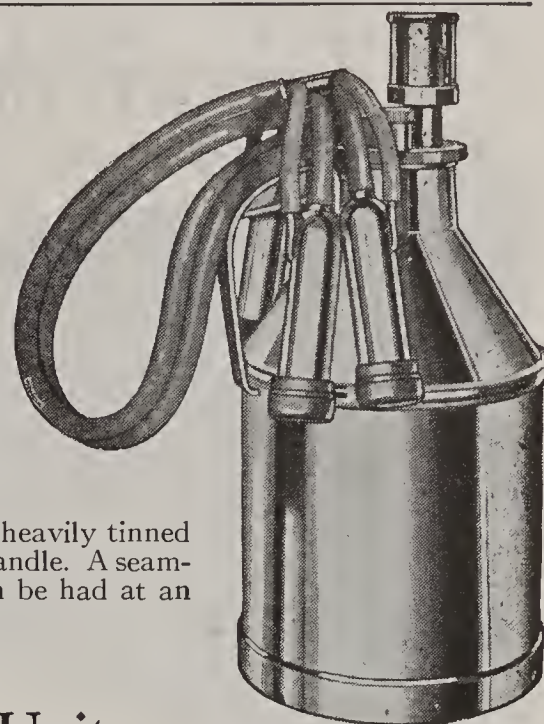
HINMAN PIPELINE MILKER

The Hinman "10 Star" Milking Unit

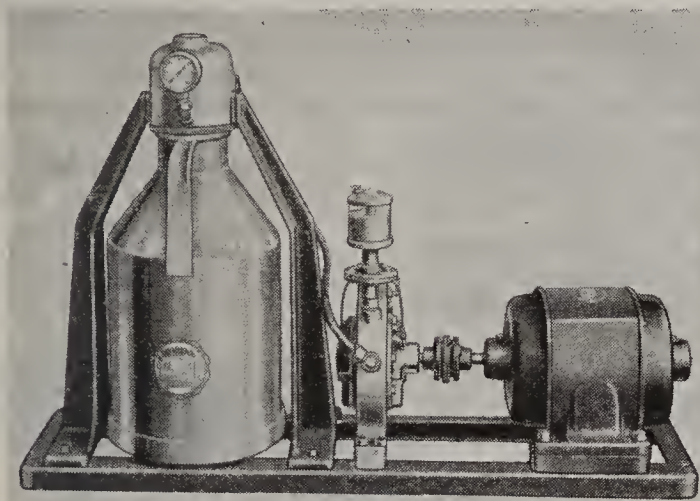
The simplest and easiest to clean of all popular Pipeline Milking Machines. It embodies the latest improvements in design—the result of many years of development and manufacture of Milkers. The Hinman "10 Star" Milking Unit can be used on any pipeline.

The teat-cups positively stay on without a surcingle; snappy relief is effective through squeeze of one-piece rubber-lined cups. New visible milk-flows; automatic vacuum shut-off at milk-claw; and a timer mechanism that has been in constant operation for more than three years, perfected in every detail.

Standard equipment includes a heavily tinned 18-quart pail with sturdy jug-type handle. A seamless, non-rusting aluminum pail can be had at an additional cost.



"10 Star" Milking Unit



The New Hinman Power Unit

The New Hinman Power Unit

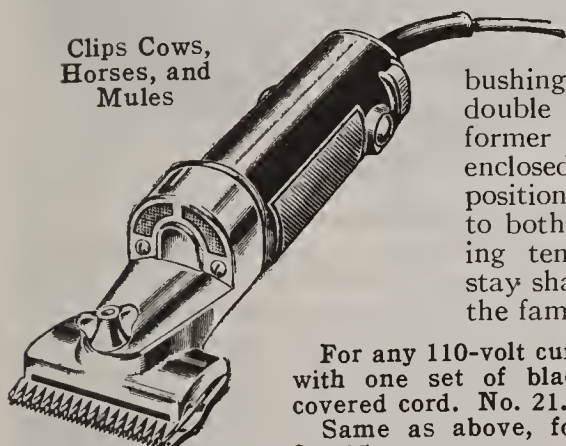
A completely assembled unit—motor and pump are direct connected. No belts required; no complicated parts to oil; no tank that is hard to clean. All these difficulties are swept aside by the compact Hinman Power Unit with visible automatic lubrication. Furnished with either Electric Motor or Gasoline Engine

Ask for price-list and complete details of this latest improved Milker before you buy any Milker

Stewart Clipping and Shearing Machines

Latest Model 21 Clipmaster

Clips Cows,
Horses, and
Mules



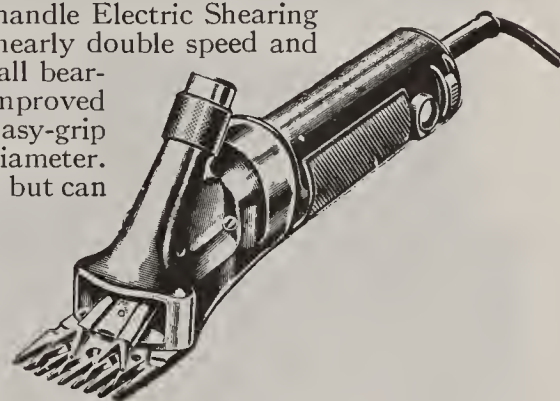
Has new motor with ball-bearings instead of bushings that develops nearly double the speed and power of former models. Air cooled by enclosed fan. Shock-proof composition handle—no ground wire to bother with. New ball-bearing tension enables blades to stay sharp longer. The latest of the famous Stewart Clippers.

For any 110-volt current, AC or DC, complete with one set of blades and 20-foot rubber-covered cord. No. 21. \$16.95.

Same as above, for 32-volt direct current. \$18.95.

New Improved No. 31 Shearmaster

New improved motor in handle Electric Shearing Machine. Motor develops nearly double speed and power of former models. Ball bearings instead of bushings. Improved E-B tension control. Easy-grip handle just 2 inches in diameter. Designed for sheep or goats but can be used for clipping by changing the bottom blade or comb for No. 4-HC clipping blade listed below.



For 110-volt current, either AC or DC, complete with comb, cutter, and 20-foot special rubber-covered cord. No. 31. \$19.95.

Same as above, for 32-volt current. \$21.95.

SHEARING MACHINES ARE FOR SHEARING SHEEP OR GOATS—CLIPPING MACHINES FOR COWS, HORSES, AND MULES

Stewart HAND-OPERATED Clipping and Shearing Machine

For Clipping—No. 1

Where electricity is not available, this is the most satisfactory Clipping Machine. Built sturdy and strong for years of use. Complete with 6-foot flexible shaft and chain, latest patented D-1 clipping head including one set of blades. Shipped complete, knocked down, in wooden box. No. 1. \$12.50.

For Shearing—No. 9

Special gears make this Stewart Machine the easy way to shear sheep and goats. Universal jointed cog-driven shaft with light-running, ball-bearing No. 7 narrow handpiece complete with two combs, four cutters. Shipped complete, knocked down, in wooden box. No. 9. \$22.95.



No. 9

Extra Blades for Shearing

- No. 276. Three-tooth top plate or cutter for No. 9. 30 cts.
- No. 4-HA. Four-tooth top blade or cutter for Shearmaster. 35c.
- No. 277. Ten-tooth bottom blade or comb for No. 9. 80 cts.
- No. 4-HB. Eleven-tooth bottom blade or comb for Shearmaster. 75 cts.
- No. 4-HC. Bottom blade for Shearmaster; for use in clipping only. \$1.50.

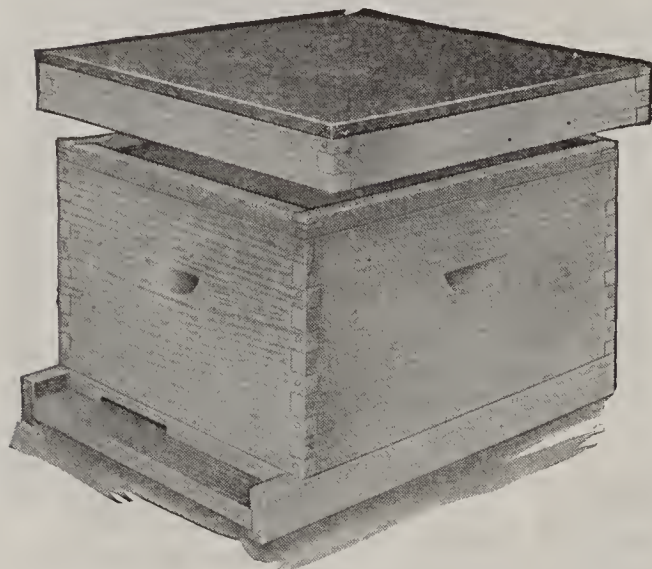
Extra Blades for Clipping

- No. 360. Top blade for B-1 clipping head only. \$1.25.
- No. 361. Bottom blade same as above. \$1.75.
- No. 90. Top blade for C-1, D-1 or D-2 clipping heads. \$1.25.
- No. 99. Bottom blade same as above. \$1.75.
- No. E-1. Top clipping blade for J-1 and J-2 Clipmaster only. \$1.25.
- No. E-2. Bottom blade same as above. \$1.75.
- No. C-71M. Top blade for Model 21 Clipmaster. \$1.25.
- No. 72-M. Bottom blade same as above. \$1.75.



START BEEKEEPING—IT PAYS WELL

Standard Hives



We handle the very best bee supplies made, the well-known Root Quality Line. Every article of Root Quality Bee Supplies is guaranteed to give you absolute satisfaction. If you do not find what you want listed on these two pages, write for our 64-page catalogue.

Standard Hive
with metal cover
KD. 10 Frames (no
comb-foundation).

5 for \$15.55

This Hive is the one most generally used by the largest honey-producers on account of its light weight and the ease with which it may be moved from one location to another. However, it must be packed for winter. It is of highest quality throughout, being made of best selected pine lumber, perfectly milled and fitted together.

This Hive is 16 $\frac{1}{4}$ x 20 inches, and 9 $\frac{5}{16}$ inches deep, outside measurements.

Hives in the flat are furnished with nails, tin rabbets, reversible bottom-board, metal cover, with inner cover, Hoffman frames. 8-frame Hives are 8 per cent less.

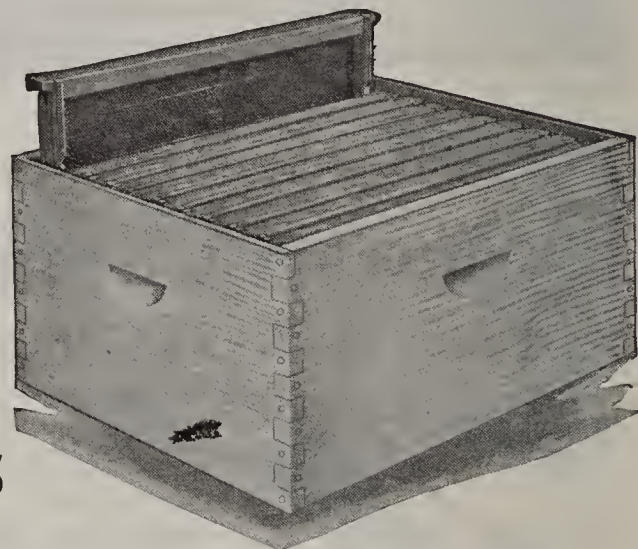
Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22202	Standard Hive complete, no comb-foundation	1 KD	31	\$3 45
22203	Standard Hive complete, no foundation	5 KD	149	15 55*
22205	Standard Hive complete, full sheets foundation	1 NP	33	7 50

*Packed in four packages.

It Pays to Have Extra Hive-Bodies

**Five
Hive-Bodies**
10-Frame Size
No Frames

\$4.10



What is said about the Root Hive applies, of course, to Root Hive-Bodies. The standard dovetailed Hive is of Langstroth dimensions, 10-frame size, and measures 16 $\frac{1}{4}$ x 20 inches and is 9 $\frac{5}{16}$ inches deep. The Hive-Body may be used either as a brood-chamber, i. e., the lower story of the Hive, or as a full-depth upper story or super for extracted honey, thus forming a two-story Hive. Nails and tin rabbets included with bodies. No division-board.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22482	Standard Body with frames, no foundation	1 KD	15	\$1 70
22488	Standard Body without frames	5 KD	45	4 10
2910	Hoffman Frames for use in these bodies	50 KD	25	2 85
2910	Hoffman Frames for use in these bodies	100 KD	47	5 55

5 Shallow Extracting Supers \$4.75
KD, with frames, no foundation



Shallow Extracting Supers (5 $\frac{11}{16}$ inches deep)

This Super is largely used in the production of chunk honey. It is also used for producing extracted honey in shallow frames, two of these frames fitting together in an extractor comb pocket of 12-inch width. Two of these Supers may also be used as one brood-chamber Hive, and any style of Super may be used above for comb or extracted honey. This Super is also used for section-holders holding 4 x 5 sections. This is our regular extracting Super, 5 $\frac{11}{16}$ inches deep, and is furnished with shallow Hoffman frames, 5 $\frac{3}{8}$ inches deep, without foundation. No tin rabbets or division-boards furnished.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22522	10-Frame Super with shallow frames, no foundation . . .	1 KD	9	\$1 00
22523	10-Frame Super with shallow frames, no foundation . . .	5 KD	39	4 75

Beeway Section Super (4 $\frac{1}{4}$ x 4 $\frac{1}{4}$ x 1 $\frac{7}{8}$)

This Beeway Section Super, 4 $\frac{3}{4}$ inches deep, is most commonly used. It takes slotted section-holders, slotted wood separators, follower, and springs, and is furnished with or without sections, and with or without inch foundation starters. It may be used on any of our single or double-walled hives, tiered up one or more high.

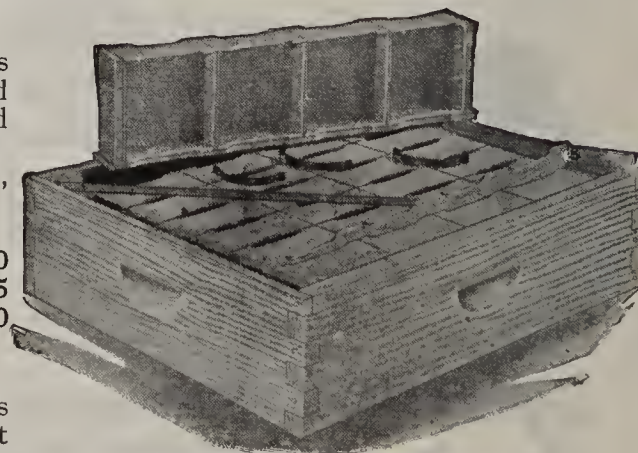
Super complete without sections includes nails, flat tins, end-stops, Super springs, slotted section-holders, slotted separators, and follower.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22542	10-frame Super, without sections or foundation	1 KD	8	\$1 00
22543	10-frame Super, without sections or foundation	5 KD	42	4 75
22545	10-frame Super, with sections, full sheets	1 NP	11	3 00

Plain Section Super (4 x 5 x 1 $\frac{3}{8}$)

It is a deeper Super (5 $\frac{11}{16}$ inches), and is fitted with section-holders and M fences with end-stops and springs. The regular 16 $\frac{1}{4}$ -inch ten-frame width will easily admit eight section-holders and eight fences with Super springs. Super complete without sections includes end-stops, section-holders, fences, Super springs, flat tins, and nails.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22552	10-frame Super complete, no sections or foundation	1 KD	11	\$1 85
22553	10-frame Super complete, no sections or foundation	5 KD	50	8 45



4 $\frac{1}{4}$ x 4 $\frac{1}{4}$ x 1 $\frac{7}{8}$ Beeway Section Super

BUY ROOT BEE SUPPLIES—SAVE MONEY



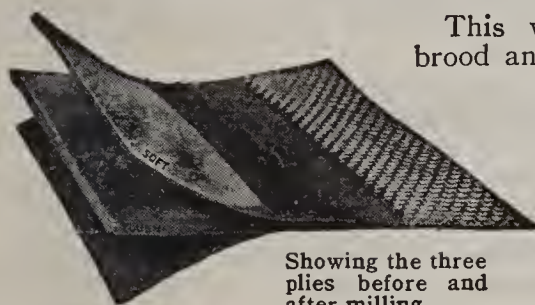
100 BEEWAY SECTIONS \$1.35
4 1/4 x 4 1/4 x 1 3/8

Root Section Guarantee

Made of finest basswood lumber, sorted with great care, dried exactly right, planed and cut exactly, expertly polished, dove-tailed perfectly. Rounded bottom, V-grooved, so wood bends without breaking.

Quan.	4 1/4 x 4 1/4 x 1 3/8 in.	Wt. lbs.	Price	4 x 5 x 1 3/8 in.	Wt. lbs.	Price
100	2440.....	8	\$1 35	2450.....	6	\$1 25
500	2442.....	31	6 45	2452.....	28	5 95
1000	2443.....	62	12 90	2453.....	56	11 90

Three-Ply Airco Comb Foundation



Showing the three plies before and after milling.

This wonderful foundation for brood and extracting combs is the best because there is no sagging, no warping, one-third more worker cells, least amount of gnawing, and 7 sheets to the pound.

Leads all others in volume of sales.

5000. 10-sheet pkg. For Hoffman Frames 8 x 16 3/4.....\$1 00
5003. 50-sheet pkg. For Hoffman Frames 8 x 16 3/4..... 4 70

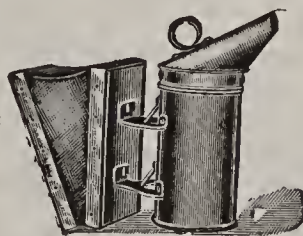
Single-Ply Airco Comb Foundation

Genuine Airco Process Foundation, made into clear tough sheets from finest quality pure beeswax. Brood Foundation is cut in sheets size 8 x 16 3/4 inches; Super Foundation sheets are 3 7/8 x 15 3/4 inches and 3 11/16 x 14 1/4 inches. The package numbers in the following price-list are for medium brood sizes, 8 x 16 3/4, and for thin super sizes, 3 7/8 x 15 3/4 only. For 4 1/4 x 4 1/4-in. section.

Medium	Per pkg.	Thin	Per pkg.
5110. 10-sheet pkg.....	\$0 85	5331. 1-lb. box.....	\$0 80
5113. 50-sheet pkg.....	4 00	5333. 5-lb. box.....	3 60

Smokers

The latest improved model has anti-spark tube, which provides a safe force draft, has long-life flexible hinge, and wire handle, that is always cool. 423, Standard Tin Smoker, with 3 1/4-inch fire-box (weight 2 lbs.), \$1 each.



Queen Excluders

Queen Excluders are used to confine the queen to the brood-chamber, and are very generally used in the production of extracted honey. 4241, 10-frame, 7-wire and wood, 16 1/4 x 20 inches (weight 3 lbs.), 70 cts.

Root Bee-Veils

Root Indestructible Bee-Veil, made of highest grade, dead-black wire cloth, is comfortable and snag-proof. Can be worn on any hat. 255. Root Indestructible Bee-Veil, weight 1 lb.....\$0 80
253. Veil, cotton tulle throughout, weight 3 ozs..... 70

Root Collapsible Bee-Hat

Designed especially for beekeepers' use. 256, Root Bee-Hat (weight 4 ozs.), \$1 each.

Extract Your Honey

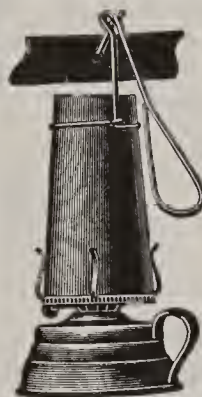
ROOT'S THREE-FRAME HONEY EXTRACTOR AND CAPPING DRYER

This machine holds 3 frames at a time and has the same ball-bearing construction as other Root extractors. The supports at the side of the combs are quickly removed. The cappings can then be dumped into the big reel which is a perfect cylinder. Cappings are spread out evenly around the reel when the machine is operated, and the honey is easily thrown out of this thin layer. 4035, Pocket size, 9 1/2 x 16 inches (weight 50 lbs.) \$14.90.



Hive Tool

This tool is indispensable in scraping frames and prying them loose. 404, 8-in., 48 cts.

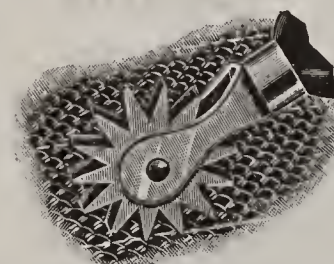


Root Foundation-Fastener

The cut at the left shows the Root Foundation-Fastener with lamp. It is a very rapid tool and gives excellent results where a cheaper tool is wanted. 415, Root Fastener with lamp (weight 8 ozs.), 60 cts. each. 416, Root Fastener without lamp (weight 2 ozs.), 20 cts. each.

Double Exit Bee-Escapes

In taking off honey the Bee-Escape is the greatest labor-saver ever invented. It frees the supers of bees so that no shaking of heavy supers or smoking is necessary. 411, Double Escape, without board, 13 cts. each. 22676, Porter Board with Double Escape, nailed (weight 2 lbs.), 55 cts. each.



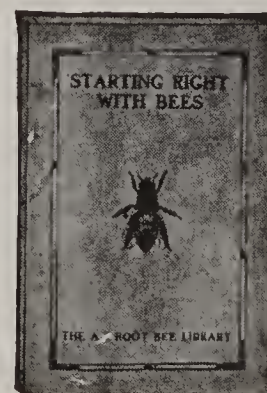
Spur Wire-Imbedder

This is an excellent device for imbedding the wires of frames into the sheets of foundation. The teeth are broad and blunt so there is no danger of weakening the foundation.

401, Spur Wire-Imbedder (weight 3 ozs.), 20 cts. each.

Wire for Frames

This Wire is used to hold foundation or combs securely in the frames, and at the same time reduce the danger of sagging. 670 feet are required for 100 Hoffman frames. 447, 1/2-lb. spool tinned wire, 700 feet, 27 cts. each.



Starting Right with Bees

The best beginners' book that is on the market. It was written by the editors of *Gleanings in Bee Culture*.

128 Pages

124 Illustrations

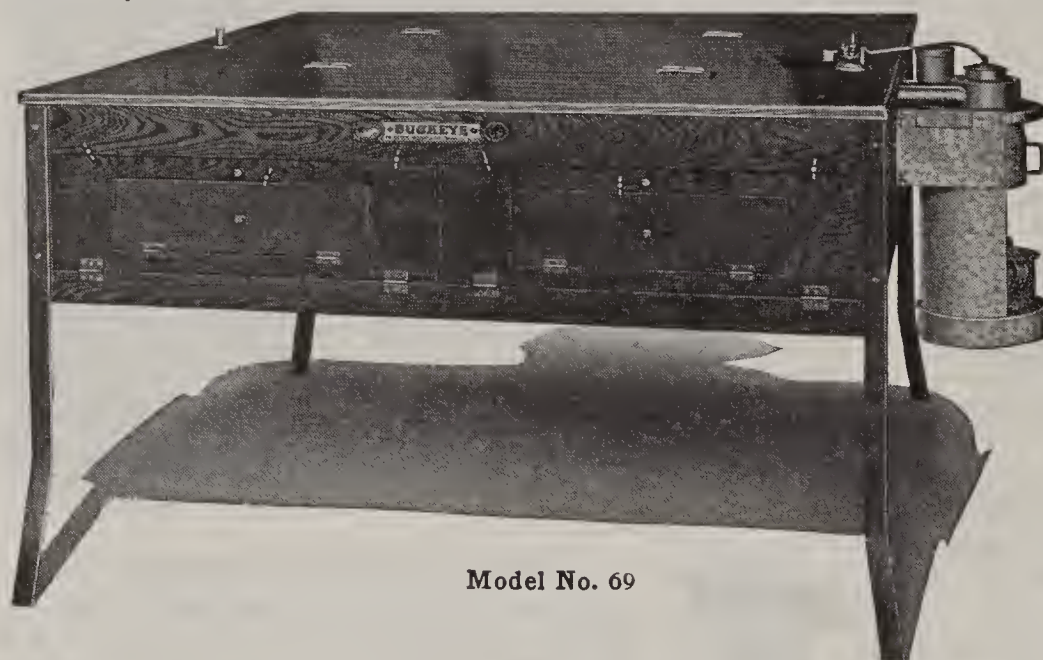
BEAUTIFUL FABRIKOID COVER

50c.

Poultry Equipment and Supplies

All of the supplies and equipment listed on the following pages have been thoroughly tested and found reliable for the uses for which they are intended.

We do not hesitate to recommend any of this merchandise and stand back of everything we offer. We welcome the opportunity to serve you.



Model No. 69

Buckeye Standard Incubators

With New Automatic Egg-Turners

Buckeye Incubators are constructed of cypress—the best material for Incubators—and are finished in natural grain, with the most durable of varnishes.

The four larger models have double walls, with heavy insulating material between, assuring retention of heat with the utmost fuel economy.

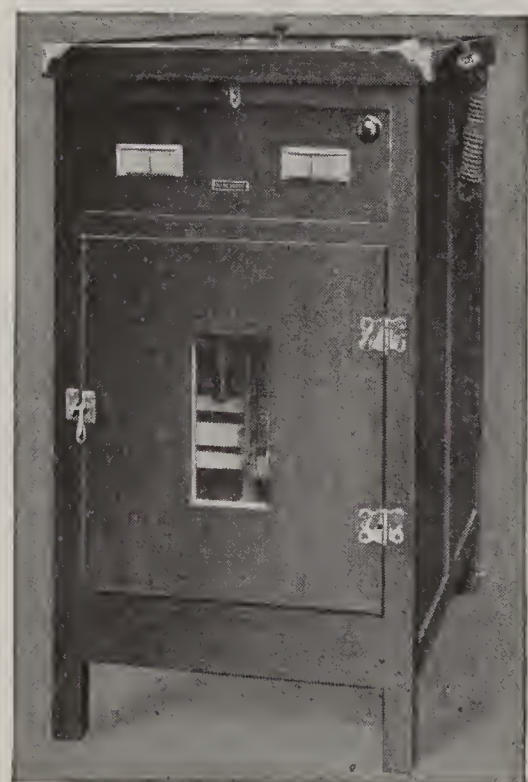
The Buckeye Patented All-Metal Thermostat insures absolute regulation of temperature. It is absolutely reliable.

The heating-tank is built of heavy copper.

Underwriter's Label on all models, except No. 65, as a warranty against fire-hazard. All Buckeye Incubators, except No. 65, are equipped with Buckeye Automatic Egg-Turners. The tray is strongly and simply constructed and there's nothing to get out of order. Egg-Tester and Thermometer furnished free with each Buckeye Incubator.

	Capacity	Weight	Price
No. 65.	75 eggs	53 lbs.	\$18 50
No. 66.	143 eggs	113 lbs.	39 50
No. 67.	286 eggs	175 lbs.	57 75

	Capacity	Weight	Price
No. 68.	416 eggs	205 lbs.	\$76 50
No. 69.	576 eggs	270 lbs.	97 50



Leland Wilson Incubator

*Hatch Chicks
the Electric Way
with a*

Leland Wilson Electric Incubator

**A Sensational
Development in
Incubators**

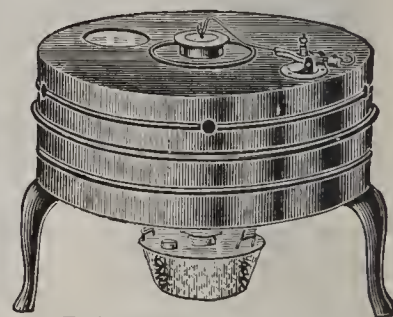
A Wilson Incubator will save you more money than any measures of economy you could inaugurate on the poultry-farm. It will pay for itself in two or three hatches.

Sturdily built of the best materials, it has many exclusive features: circulating air, automatic temperature control, patented heater, and moisture indicator and control. The machine can be used for continuous hatching; all or any part of the capacity can be used. The operating cost is low—about 60 KW hours of electricity will complete the hatch in the 600-egg size. Equipped for 110-volt A. C. current, but can be furnished with other motor specifications. Shipped complete ready to plug in socket.

Capacity		Capacity	
384 eggs.	\$49 50	1,200 eggs.	\$110 00
600 eggs.	68 00	2,100 eggs.	187 00

Baby Grand Incubators

An efficient, low-priced Incubator that provides for the small poultry raiser a machine that is dependable and economical to operate. It is made entirely of metal, has double walls, and is equipped with a moisture receptacle so artificial moisture can be applied if necessary. The temperature is controlled by a reliable wafer thermostat. Has window in the top so thermometer can be easily seen and read. The electrically heated Incubator is heated with a 60-watt electric bulb. Capacity, 50 eggs.



Baby Grand Oil-heated Incubator

No. 91H. Oil-heated.	\$6 00
No. 95E. Electrically heated.	8 00

Oakes Electric Incubator and Brooder

A wonderful hatcher. Comes ready to plug in on any light socket. Easy to regulate to correct incubation. In room temperature of 70° F., current consumption of No. 87 is about 10 KWH; No. 88, about 13 KWH for 21-day hatch.

May be used for any domestic or game-bird eggs. When hatch is completed, top may be lifted off and used as a Brooder. Legs and curtain for Brooder assembly are regular equipment. Furnished in 110-volt A. C. current. Complete with Thermometer and Automatic Thermostat.

No. 87. 60-egg size.	\$14 75	No. 88. 100-egg size.	\$18 00
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Super-Heat Oil Brooder Stove

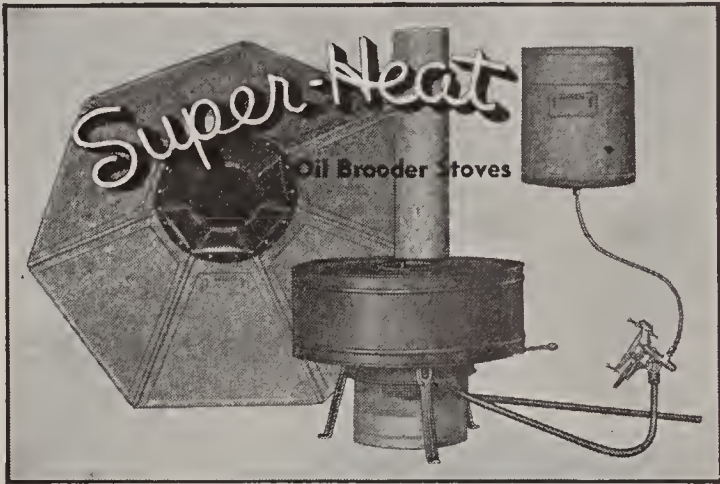
ECONOMICAL TO OPERATE—RELIABLE—LOW IN FIRST COST

An efficient, safe, and economical Brooder which provides the same abundant heat as a coal Brooder, with a big saving in labor in handling fuel and ashes. Burns with a clean flame, which is evidence that no fuel is being wasted and that the full benefit of all the heat units in the oil is being utilized. The heat is automatically regulated by an all-brass gun-type control valve so that an ever, uniform heat is maintained under all conditions.

Equipped with cast-iron burner, side shaker cleaner rod, heavy sheet-metal base, and safety screen.

The canopy is of heavy, galvanized steel, 34 inches in diameter. Tank holds 6 gallons of oil. Furnished complete as illustrated.

A real buy at \$11.45



MaKomb Humane Oil-O-Stat Brooder

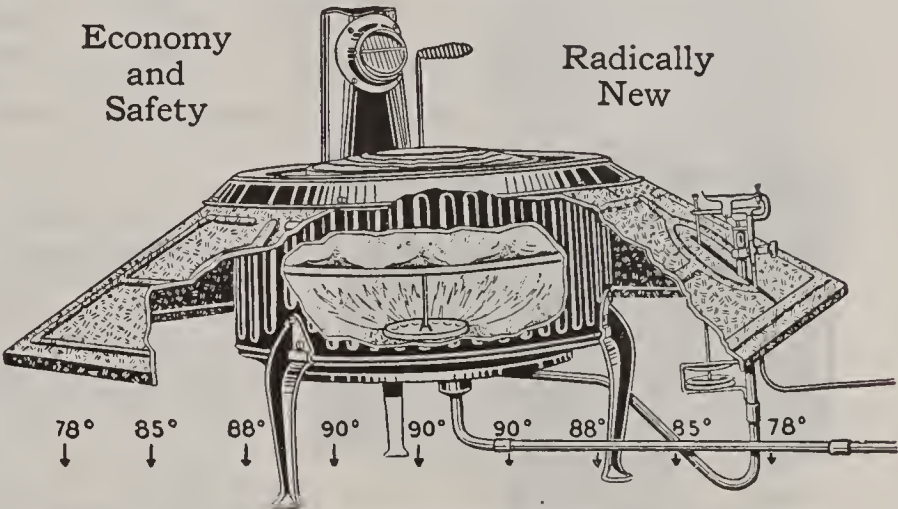
The Humane Oil-O-Stat makes a revolution in Brooder design. It is so designed that an even heat is maintained under the Brooder, allowing the chicks to brood directly under and around the heater, eliminating the ring or canopy-edge method of brooding.

It provides all chicks at the same time with comforting, protective temperatures and eliminates areas of destructively high temperatures.

Drum is copper-bearing blued steel, doubly resistant to rusting. The all-cast twin blast burner is very quiet and smooth in operation.

Heater is 24 inches in diameter. Valve has safety overflow tube to keep oil off the floor and is easily adjusted so the stove cannot get overheated. Operates efficiently at 20° below zero or 70° above. Canopy is hexagon shape and made of galvanized steel. Capacity of tank, 9 gallons.

	Capacity	Diam. of canopy	Shipping Wt.	Price
No. 1956.	Up to 600 Chicks	56 in.	81 lbs.....	\$19 95
No. 1965.	Up to 1,000 Chicks	65 in.	86 lbs.....	21 00



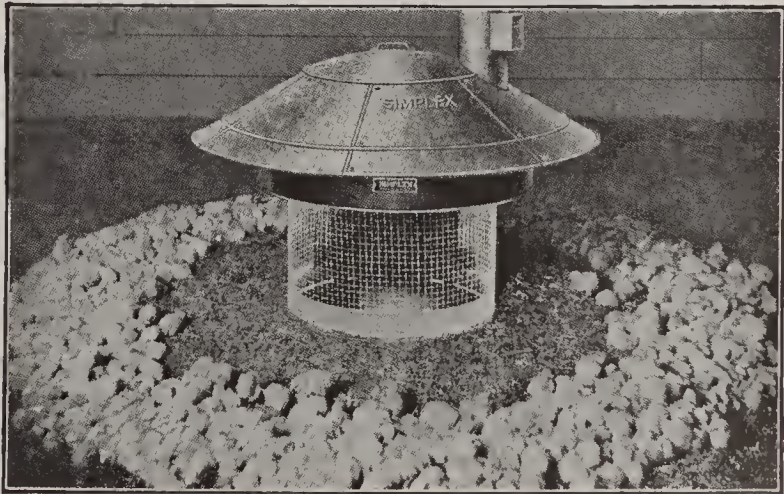
Simplex Brooder Stove

Successfully Broods Chickens, Turkeys, or Pheasants

The Simplex is constructed with heavy cast-iron base and burner, with steel legs. The body of the Stove is made of heavy black sheet steel. It has a large circulating radiator on the top; around which the heat from the burner must pass before escaping. The heat is caught by the deflector which covers and extends over the top of the radiator, so that all the heat is deflected to the floor and not allowed to go to the ceiling until it has warmed the backs of the chickens.

The Simplex Burner is especially designed to make "going out" impossible. All conditions of back-firing are removed, which insures perfect safety. It is capable of giving any range of heat desired. It can be regulated to run as low as the ordinary house-lamp and will go as high as necessity requires, and will not go out under either regulation.

SIMPLEX RADIATOR AND DEFLECTOR. These are fuel-saving features of this Stove. Every heat unit must make a complete circle around the body of the Stove through the radiator before its work is done and it is allowed to escape through the stove-pipe. The oil-consumption is from 1 to 5 gallons per twenty-four hours, depending on the size Stove and time of year that you are brooding your chicks.



No.	Size	Capacity	Diam. of Deflector	Diam. of Drum	Price
J41.	Junior for Oil	600 Chicks	41 in.	24½ in...	\$23 90
S48.	Senior for Oil	1,100 Chicks	48 in.	28½ in...	27 65
JG41.	Junior for Gas	600 Chicks	41 in.	24½ in...	21 90
SG48.	Senior for Gas	1,100 Chicks	48 in.	28½ in...	25 05

Simplex for Turkey Poults

No.	Size	Capacity	Diam. of Deflector	Diam. of Drum	Price
JT41.	Junior	350 Poults	41 in.	24½ in.....	\$23 90
ST48.	Senior	700 Poults	48 in.	28½ in.....	27 65

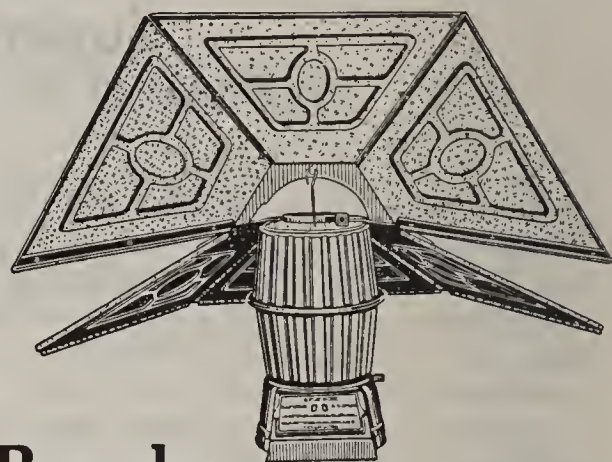
SPECIAL CATALOGUE ON REQUEST

Improved MaKomb Coal Brooder

Outstanding value is evident in every detail of these improved models. The MaKomb is easy to operate—nothing complicated or to get out of order. Requires little attention. It is scientifically designed to raise more chicks with less work and less fuel.

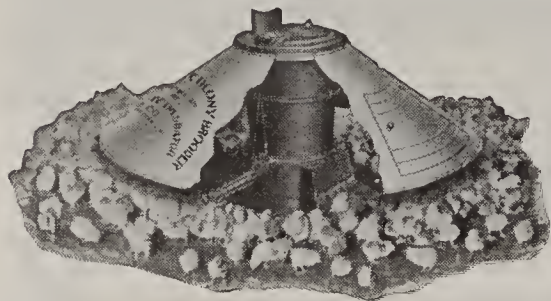
The husky, cast-iron stoves have fluted barrels for greater radiation and efficiency. Patented upper damper leaves the stove-top entirely clear so the coal-door is extra big and handy. It hinges back against the pipe, out of the way.

The canopy is made of best galvanized iron and mounted on a big "hinge" casting and heavy steel angles reinforce the interlocking edges.



Model	Coal Capacity	Chick Capacity	Diam. of Canopy	Weight Crated	Price
No. 656.	40 lbs.	Up to 500	56 in.	102 lbs.....	\$12 90
No. 765.	66 lbs.	Up to 1,000	65 in.	124 lbs.....	16 25

The Buckeye Coal-Burning Brooder

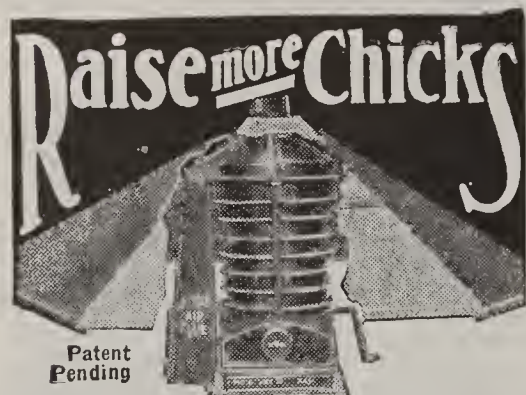


A Brooder that burns hard or soft coal, is self-feeding, self-regulating, simple and safe. Nothing to break—built for long life. Equipped with a double automatic regulator that accurately controls the temperature every minute of the day and night. Stove is of heavy cast iron, equipped with rocker grate. Self-cleaning and anti-clog. Painted gray and trimmed in red, giving them very attractive appearance.

These Brooders are equipped with a revolving canopy, with large door, eliminating the canopy bail, rope, and pulleys and permitting easier cleaning around the Brooder. Note the following coal capacity, size and weight of stoves, diameter of canopies, size of grates, and compare them with other coal-burning stoves of the same chick capacity on the market today. Note the new low prices—lower than ever before.

	Capacity	Diam. of grate	Diam. of canopy	Coal capacity	Smoke pipe	Shipping weight	Price
No. 118.	500 chicks	9 ³ / ₁₆ in.	52 in.	40 lbs.	5 in.	102 lbs.....	\$17 95
No. 119.	1,000 chicks	10 ⁹ / ₁₆ in.	56 in.	60 lbs.	5 in.	133 lbs.....	21 50
No. 120.	1,200 chicks		60 in.	75 lbs.	5 in.	145 lbs.....	24 75

Any of the above Brooders equipped with gas-burner in place of coal-grate at same price



The Jamesway Brooder

Don't take chances. Your whole success depends on the chicks you raise. And that means, very largely, the Brooder you use. The Jamesway is the only Brooder that has a special air-purifier and also an air-moistener—two exclusive Jamesway features.

The Jamesway has an automatic fire-control damper located in the pipe. The damper works automatically with the draft and check dampers. No overheating, then chilling of chicks. The heat-radiation surface of the Jamesway Brooder is nearly doubled by the use of seven radiation fins running completely around the body of the stove. In this way, more heat is thrown off with a given amount of coal than without this extra heating surface.

The hover revolves completely around the pipe on a cast-iron collar, giving strength and rigidity. Two doors are provided. The one above drops down for coaling. The door below tilts upward for tending fire, or cleaning out ashes. Both sizes are made for 4-inch stove-pipe.

No. 1814. Coal capacity about 35 pounds, 52-inch hover. Usual rating for this size stove is 500 to 1,000 chicks but from 400 to 500 chicks is recommended in a brooder-room 8 to 12 feet square. \$17.75.

No. 1660. Coal capacity about 45 pounds, 60-inch hover. Usual rating for this size stove is 1,000 to 1,500 chicks but from 300 to 800 chicks is recommended in a brooder-room 10 to 18 feet square. \$21.50.

Newtown Colony Brooders

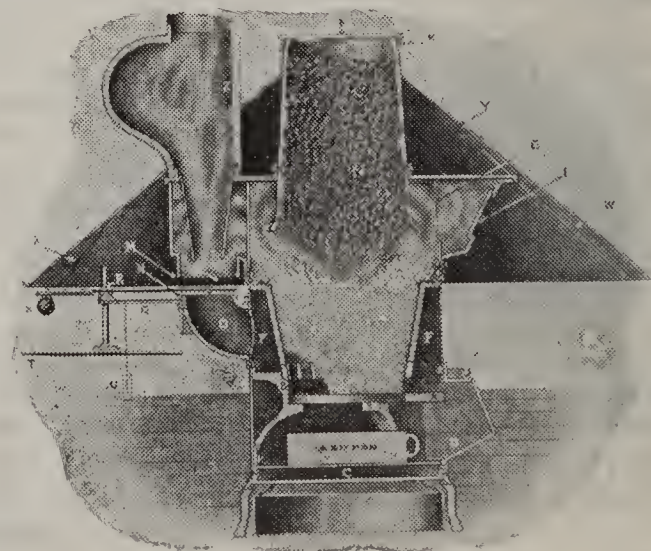
Will Raise Every Raisable Chick—Ask Any Owner

The Newtown Coal-burning Brooder has the reputation of being the most efficient Brooder made. It was the first coal-burning, self-feeding, self-regulating Colony Brooder put on the market, having been longer in use than any other of its type. It is durable, easy to operate, safe, economical, and labor-saving.

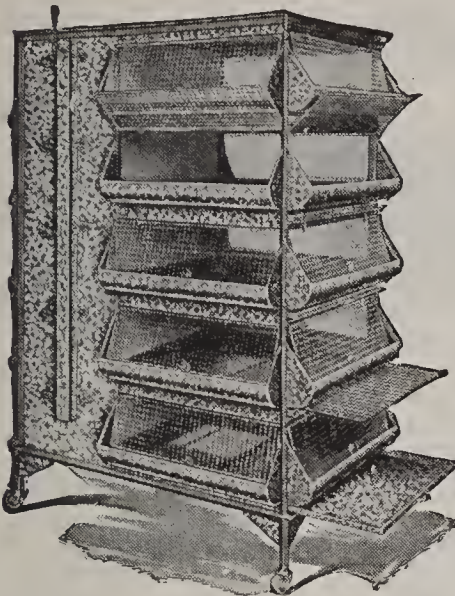
Made of best-grade, heavy, heat-retaining castings. Automatic regulator controls the drafts and no change in weather is too sudden for its adjustment. Magazine holds sufficient fuel to last 24 to 36 hours. Turning one small adjusting nut enables one to secure any desired temperature. Smoke-box ell prevents soot or other foreign matter from falling down smoke-pipe and interfering with draft regulation.

Big Exclusive Features

Note the cross-section view of the Newtown Coal Brooder opposite. When you think of these features you can see how Newtown is built to brood chicks under every emergency. It cares for all your chicks regardless of weather conditions; burns a good grade of soft coal satisfactorily, as well as hard coal; holds the fire and does not require constant attention. You don't have to get up at night to see if your chicks have enough heat. They're always safe and warm with Newtown.



Model	Chick Capacity	Coal Capacity	Diam. of Hover	Diam. of Grate	Weight Crated	Price
No. 11.	Up to 500	48 lbs.	50 in.	11 in.	206 lbs. . .	\$28 50
No. 12.	Up to 1,000	65 lbs.	56 in.	15 in.	306 lbs. . .	36 50



Oakes Battery Brooder

An ideal unit for starting chicks. By its use chick mortality is reduced to almost zero for the first three weeks. Metal construction throughout—strong and sturdy; portable—can be rolled any place easily. Automatic temperature control in each compartment. Droppings-pans and 1/2-inch mesh wire floor, removable from front and rear. Each compartment has 2 feed-troughs and 1 water-trough. Total floor space in 5 compartments, 6,960 square inches. Capacity, 750 day-old chicks.

Choice of three heating methods: Electric, Gas, and Hot Water. Construction of all three models is exactly the same, except heating units.

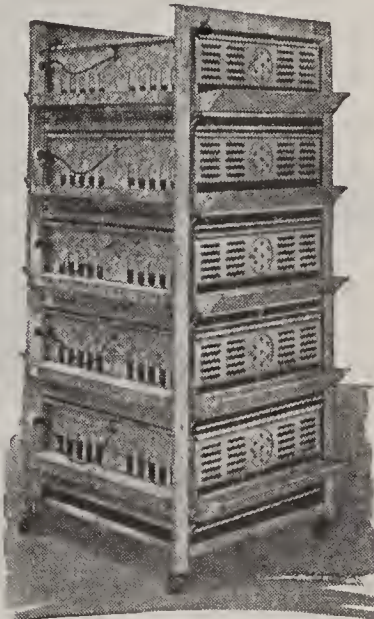
	Each
No. 709E. Electrically heated	\$100 00
No. 709G. Gas-heated	96 00
No. 1709. Hot-water heated	100 00

Jamesway Electric Battery Brooder

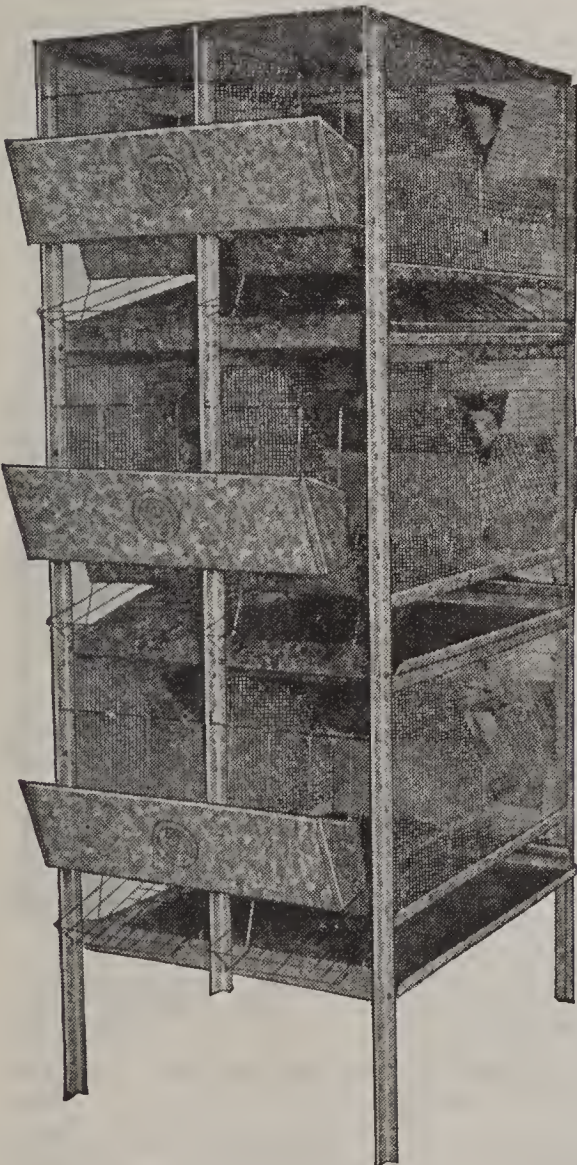
The Jamesway Electric Battery Brooder permits the poultryman to raise his chicks quicker and with less work than without one. It is made in two sizes and in two styles in the 1,000-chick size. Each compartment holds 100 day-old chicks, operated independently and has an automatically controlled electric heating unit which extends across the top of each section, thereby giving an even distribution of heat.

The clearance of 1 3/4 inches between the floor-screen and removable droppings-pan helps to make this Battery Brooder easy to keep clean. Oversize feeding-pans are located both front and rear and are easily removed and cleaned. The watering-troughs are also removable. Feed and water-openings are adjustable to accommodate large or small chicks.

The heating connection for each unit is located in the corner post. You need to heat only the sections where the chicks are and turn on heat in other sections only as chicks are added. These heating units operate on 110 or 220-volt A.C. or D.C. current. Can be used without electric heating units if used in a heated room. Mounted on substantial truck which makes them portable. Shipped knocked down for freight savings, but easy to assemble.



Jamesway Electric Battery Brooder No. 1151



MaKomb 12-Hen Laying Battery

- | | |
|---|-----------|
| No. 1151. 5-Compartment, 500 baby-chick size..... | \$65 00 |
| No. 1155. Single Compartment, 100 baby-chick size.. | 10 50 |
| No. 627. 10-Compartment, 1,000 baby-chick size... | 123 00 |
| No. 1181. Wire Broiler Fronts. (2 required for each compartment.) | Each.. 40 |
| No. 151. 10-Compartment, 1,000 baby-chick size. Larger and more open compartments than No. 627. Has red feeding lights..... | \$154 50 |
| No. 350. 10-Compartment Grower Battery. Practically same as No. 151 Battery Brooder, except without heat and with higher compartments to take care of broilers up to 10 to 12 weeks of age..... | 100 00 |

For very large broods of chicks, Jamesway has designed a continuous hot-water brooding system, built to take care of any size flock and to fit in any building. Write for prices.

MaKomb Laying Battery

Sufficient experimental work has been carried out during recent years to prove that the Laying Battery method of producing eggs and meat at a minimum cost can be successful. In the 1937 model of MaKomb Laying Batteries the latest improvements in Laying Battery equipment have been incorporated.

Previous to this time the Battery was in an experimental stage, but now we feel that it has reached a working perfection.

Lowers feed-cost. Reduced feed-consumption is assured and 10 pounds of feed should be saved annually per hen.

Labor reduced. With this new model 1,000 hens can be cared for easier than the same number can be taken care of in the old floor method. Once the routine of handling the MaKomb Batteries is learned, you can do your work in a remarkably short time.

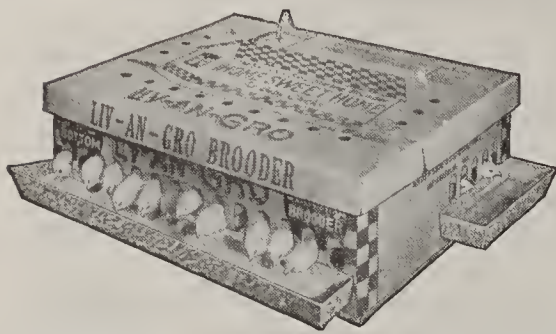
Automatic culling. It is easier to discover the non-producers and ailing fowls, with consequent greater opportunity to avoid total loss.

Doubles capacity. For example, allowing the recommended 4 square feet per bird, a house 20 x 60 feet should carry 300. Equipped with rows of 9 72-bird units, it houses 648, with wide aisles to work in. Buildings are a costly factor, and the securing of double capacity justifies the use of Batteries.

- | | Each |
|---|---------|
| No. P6-112. 12-Hen Battery | \$23 00 |
| No. P6-160. 60-Hen Battery | 110 00 |
| No. P6-172. 72-Hen Battery | 130 00 |
| No. P7- 44. Finishing Battery. Capacity 100 2-lb. broilers..... | 34 00 |

Ask for descriptive circular and see the Battery on display at our store

Liv-an-Gro Brooder

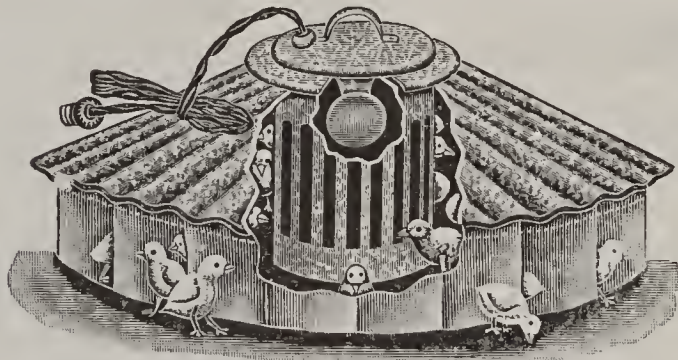


It is easy to raise chicks in this efficient, low-priced Brooder. Both cover and body are made of heavy waterproof corrugated board. Has large, removable feed- and water-pans. Free circulation of air is provided by the wire screen floor. An ordinary 40-watt electric light

bulb supplies ample and uniform heat. Furnished with lamp socket, 6 feet of extension cord and plug connection. (Bulb is not furnished.) Capacity, 50 day-old chicks.

No. LG-2. \$1.95

Oakes Educator Electric Hover



A low-priced, trouble-proof Electric Brooder for 50 to 60 chicks. Can be used in any heated room or basement. Uses bulb for heat (bulb not furnished). Canopy is 25 inches in diameter and made of heavy galvanized steel, with corrugations to give rigidity. Furnished with curtain to retain heat, metal stand, 8-foot drop cord, and plug-in socket.

No. 25E. \$2.25

Jamesway Electric Hover

Jamesway 32-in. Electric Hover

Broods chicks with no smoke, gas, or ashes. A very well-built Hover having double-shell canopy, with heavy insulation between. Single feed-line with 200-watt ring heating element thermostatically controlled. May be set at desired temperature. A special safety spring is provided for wafer protection; all regulator points enclosed for safety. Air vent-pipe through center. Rubberized, removable curtains. Sets on metal legs. Intended to be used in a warmed room. Capacity, 200 chicks.

No. 698. \$10.95

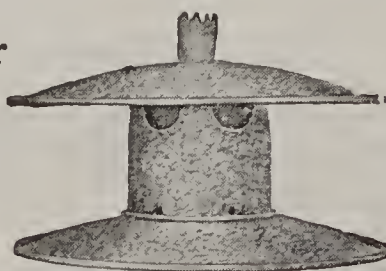
Jamesway 21-inch Electric Hover

Just the Hover for brooding a few chicks in a warm room. Equipped with 50-watt heating element. Capacity, 50 chicks.

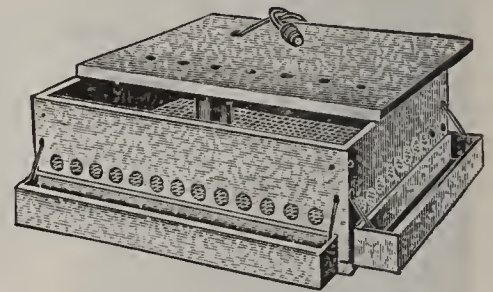
No. 696. \$4.95

Putnam Brooder Heater

The Putnam Brooder Heater is the heating plant for the Putnam Home-Made Brooder. Directions for making this brooder at trifling cost are packed with every Heater. The Heater is made entirely of brass and galvanized iron and is practically indestructible. It holds one quart of oil and burns from eight to ten days without refilling. It is firesafe and fool-proof. Price, \$4.75.



Oakes Metal-Box Brooder



Made entirely of heavy galvanized steel. Sanitary and easy to keep clean. Floor is made of 1/2-inch mesh hardware cloth. Water-trough, 18 inches long; feeder-trough, 22 inches long. Inside dimension, 18 x 22 x 6 inches high. Heated by electric bulb (bulb not furnished). Accommodates 50 day-old chicks. A real brood unit at a low price.

No. 375. \$2.50

MaKomb Elect-O-Stat Brooder



The Elect-O-Stat has everything an electric Brooder should have—plus quality construction. It carries two heating circuits of 400 watts each, which can be operated together or independently. Element made over-size to secure uniform distribution of heat from edge to edge of canopy. Has automatic snap-control switch, braided curtain, adjustable legs, pilot-light, and rubber-covered lead wire. Canopy is 52 inches square. Capacity, 400 chicks.

No. C7-452. \$21.75

Gro-Ezy Electric Brooder

This Brooder makes possible to poultrymen the battery brooding method at a surprisingly low cost. Made entirely of metal and requires only 37 x 31 1/2 inches of floor-space. Thousands of chicks can be cared for in a small room.

BROODER UNIT

Each brood unit is equipped with patented heating element, and the heat is controlled by an automatic thermostat. It has two feed-troughs and one water-trough, both removable for cleaning. Three adjustments accommodate chicks from a day old to 10 weeks. Capacity, 100 day-old chicks. Has 1/2-inch mesh woven wire floor and heavy galvanized steel droppings-pan, with 1 3/8 inches clearance from floor; both removable from front. Equipped for 110-volt A.C. Carries Underwriter's label.

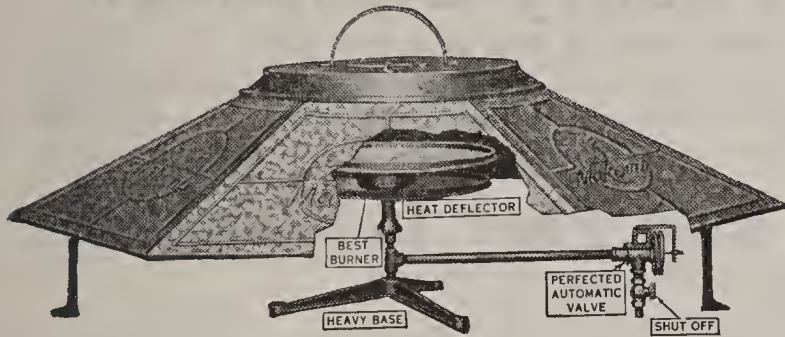
Single unit may be operated on shelf, box, or table. Unit sold separately, or in assemblies as priced.

	Each
No. 801. Single Unit.....	\$9 40
No. 803. 3 Units and Rack.....	37 20
No. 805. 5 Units and Rack.....	58 80



No. 805. Gro-Ezy Five Unit Brooder

MaKomb Automatic Gas Brooder



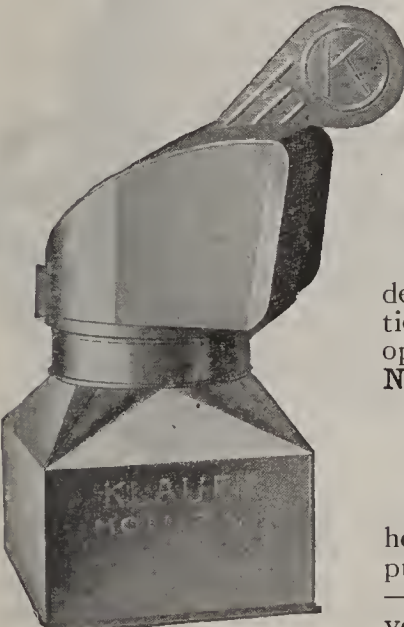
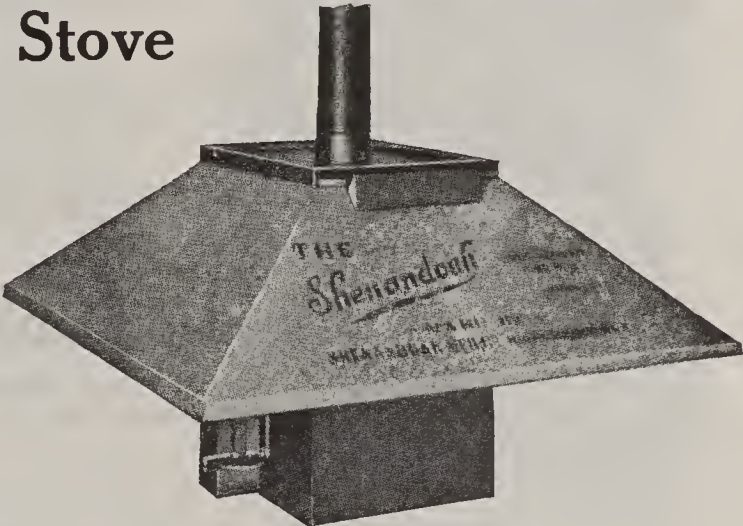
The MaKomb Gas Brooder is built for use in those localities where natural or artificial gas is available to the poultryman. This Brooder is provided with the new hexagonal canopy, firmly supported on legs. The automatic valve-construction has been held to close limits, and every precaution taken to insure perfect operation. The burner is supported by a heavy cast-iron tripod and can be operated with either natural or artificial gas.

	Capacity	Diam. of canopy	Weight	Price
No. 347.	250 chicks	45 in.	27 lbs.	\$9 00
No. 356.	500 chicks	55 in.	31 lbs.	10 50
Stove complete, without canopy, when sold separately..... 6 00				
47-in. Canopy, alone, \$4. 55-in. Canopy, alone, \$5.50.				
No. 06-V. Automatic Gas Valve only. Use on any Gas-burning Brooder 2 70				

Shenandoah Wood-burning Brooder Stove

This Stove offers the poultryman a new and dependable method of brooding chicks at a much lower fuel cost than any other method. It has been subjected to many exacting tests under all conditions and has won the reputation of being the most simple, dependable, and fool-proof Brooder ever invented. It has a large fuel chamber and will maintain a uniform temperature for at least 24 hours in severe weather after being filled with fuel. The regulator is automatic and is so designed that the fire is held under absolute control under all conditions. Every safety feature has been provided. The Hover is made of heavy galvanized iron and is hinged at the top to provide easy access to the heater door and regulator. The heater is constructed from heavy steel plate, and, with reasonable care, the Brooder should give years of service. It will burn any kind of wood either green or dry, but best results are secured with hardwood. Made in 2 sizes.

- No. 20. Broods up to 500 chicks.....\$19 00
- No. 24. Broods up to 1,000 chicks..... 22 00



Monitor Ventilator

Monitor Revolving Head Ventilator

Made of the best grade of heavy galvanized steel and has full ball-bearing head. Weather-proof and freeze-proof construction. Can be fitted to any pitch of roof. Flue 12 in., base 16 x 16 in., height 36 in. No. K12. \$7.25.

Klauer Ventilating Wall Window

For barns, poultry houses, hog-houses, or any other frame building where light and ventilation are desirable. Made of 26-gauge galvanized steel. Latch permits glass to be tilted into eight different positions. Window may be locked securely. Glass 20 x 28 in., building opening 20 3/8 x 28 3/8 in., overall size of frame 25 1/2 x 33 3/4 in. No. K2028. \$3 each, \$15.50 for 6, \$30 per doz.

Duo-Vent Metal Window-Frame

Ideal for use on brooder-houses, barns, hog-houses, milk-houses, or any other type of frame buildings not used for residential purposes. Duo-Vent Frames are easy to set up and easy to install—simply saw a hole and nail it in. Gives any type of window ventilation—opened at top without being raised, opened at top and raised in three positions, or fully opened for direct flow of air. Uses wood sash (sash not furnished).



No. K6912-3W, adjusted for top and bottom circulation

	Use	Opening	Each	1/2 doz.	Doz.
No. K4912.	4-light 9 x 12-in. sash	22 x 29 in.	\$1 30	\$6 30	\$11 60
No. K6912-2W.	6-light (2 wide) 9 x 12-in. sash	22 x 41 in.	1 70	8 25	15 50
No. K6912-3W.	6-light (3 wide) 9 x 12-in. sash	31 x 29 in.	1 50	7 25	13 50



Moe's Adjustable Roof Saddle

Made of galvanized iron and adjustable to any required angle from an almost flat roof to one-half pitch. Quickly adjusted and locked rigidly in the desired position. Size of flat roof flange 14 by 18 inches and made in two sizes for 4 and 5-inch brooder pipe. The small end of regular pipe is slipped underneath the Saddle, and as many lengths of pipe as desired can be placed on top of the Saddle.

	Each	Postpaid
No. 440. For 4-inch pipe.....	\$1 25	\$1 35
No. 441. For 5-inch pipe.....	1 35	1 45

Smoke-Pipe Top Cap

Chimney Cap for brooder stove-pipe. Made of galvanized steel, to slip on the top of regular pipe. Keeps out rain and snow and improves the draft. Easy to install; no tools or bolts required.



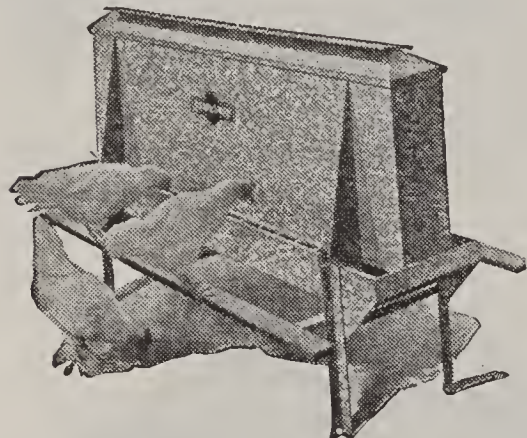
	Each	Postpaid
No. 444. For 4-inch pipe.....	\$0 25	\$0 35
No. 445. For 5-inch pipe.....	30	40
Smoke-Pipe for Brooder Stoves. Blue Steel in 2-ft. lengths,		
4-in. diam., 15 cts. per length; postpaid, 20 cts. 5-in. diam.,		
16 cts. per length; postpaid, 21 cts.		
Cast-Iron Dampers. For 4-in. pipe, 13c. ea.; for 5-in. pipe, 15c. ea.		
Elbows, Crimped. 4-in. diam., 15 cts. each; postpaid, 18 cts. each.		
5-in. diam., 17 cts. each; postpaid, 20 cts. each.		



Jamesway Poultry Equipment

EQUIPMENT THAT MAKES BIG EGG-YIELDS

Jamesway Poultry Equipment is built for the discriminating buyer who buys equipment not because of the price, but because of the service it will render in increasing egg-yields, in keeping hens healthy and contented, and in making it easier to care for them.



Jamesway Free Feed Cafeteria

FIVE BIG SELF-FEEDERS IN ONE

The only Feeder with a foolproof agitator.

The only "can't clog," "no waste" Feeder on the market.

Holds 50 to 100 pounds of mash, depending on size purchased; also has grit, oyster shell, meat-scrap and charcoal compartments.

Has tilting top to prevent hens from roosting there. Built of heavy, galvanized, rust-resisting, copper-bearing sheet steel. Unquestionably the best mash hopper made.

No. 527. Length 3 ft. Capacity 50 lbs. dry mash. Self feeds 75 to 100 hens for one week with one filling. \$9 20

No. 528. Length 5 ft. Capacity 100 lbs. dry mash. Self feeds 150 to 200 hens for one week with one filling. 13 70

Jamesway Poultry-Waterers

Built of heavy rust-resisting sheet steel and hot galvanized after fabrication which adds several years to their life. A copper float operates a brass valve, allowing fresh water to flow into the pan as it is used.

Easiest Waterer to disinfect, clean, and fill. Your hens require water in winter if you want winter eggs.

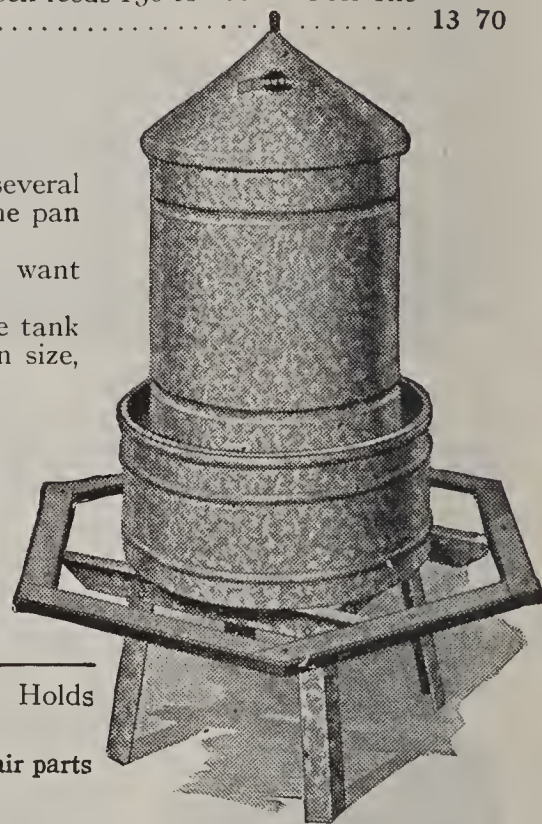
Made in three sizes. All sizes are exactly the same construction, except the height of the tank is more or less, depending on the size. Five-gallon size will accommodate 100 birds; 8-gallon size, 150 birds; 10-gallon size, 200 birds.

Five-gallon Size		Eight-gallon Size	
No. 1502.	Lamp-heated. \$5 20	No. 1512.	Lamp-heated. \$6 15
No. 1503.	Unheated. 3 95	No. 1513.	Unheated. 4 90
No. 1504.	Electric-bulb-heated. 6 50	No. 1514.	Electric-bulb-heated. 7 45
No. 1506.	Without base. 3 35	No. 1516.	Without base. 4 30

Ten-gallon size, any style, 45 cts. more than 8-gallon size

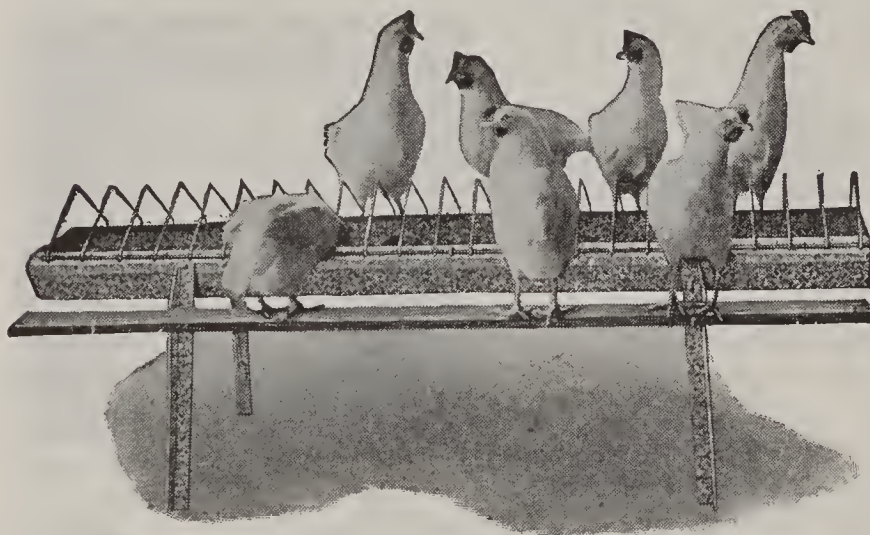
No. 585. Stand as illustrated for any size or style except Waterer without base. \$1.50.

No. 343. Stand for any size Waterer without base. For growing flocks. 50 cts.



No. 140. Kerosene Lamp. Holds 2 quarts of oil. \$1.

We can furnish all other repair parts for these Waterers



Jamesway Open-Trough Mash Feeders

Big, roomy trough for feeding dry or wet mash and green feeds. Wire guard prevents hens from getting into trough. Wide lip on trough keeps hens from pulling mash out on floor. No other trough like it. For feed-saving, cleanliness, and real satisfaction, buy this Feeder. Trough is 10 inches wide and 5½ inches deep. Perches 20 inches from floor to prevent vent-picking by birds on floor.

No. 525. Length 5 ft. Capacity about 50 lbs. mash. \$4 75

No. 657. Length 8 ft. Capacity about 80 lbs. mash. 6 60

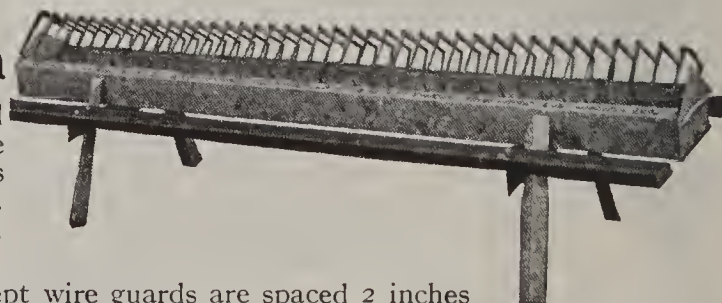
No. 925. Length 5 ft. Rotating reel in place of wire guard. 4 75

Jamesway Clean-Feed Chick-Trough

Where feed is contaminated with droppings, diseases quickly spread and chicks do not grow evenly. This Clean-Feed Trough keeps chicks out of the feed. Spacing between wire guards can be adjusted to openings 1 and 2 inches as chicks grow older. Trough provides feeding-space for 50 to 150 chicks. Made of galvanized sheet steel, 44 inches long, 6½ inches wide, 3 inches deep.

No. 600. \$1.35. No. 612. Stand (as illustrated), \$1.35 extra.

JAMESWAY GROWING FLOCK FEEDER. Same design as No. 600, except wire guards are spaced 2 inches apart and are not adjustable. Trough is 46 inches long, 7 inches wide, and 3 inches deep. Holds about 10 quarts of dry mash. No. 829. \$1.35.



No. 600 Feeder with stand

Jamesway Chick-Waterer

Poultry experts say this is the most satisfactory Chick-Waterer ever built. Made of heavy, rust-resisting sheet steel, hot galvanized after fabrication. Keeps a constant supply of clean, fresh water available for the chicks. Only two parts to clean—the inverted bucket and pan. Won't tip over. Holds 1½ gallons. Will take care of 40 to 75 chicks. Thousands in use, and every one is giving real satisfaction. No. 1407, \$1; postage 15 cts. extra.



No. 1407 Chick-Waterer

Jamesway 3-Gallon Chick-Waterer

A safe fountain for large broods of chicks. Sloping pan-edge prevents chicks from getting wet. Depth of water controlled by aluminum float concealed under tank. Float may be locked, which shuts off water. Tank can then be carried about without leaking. Unusually rugged construction. Conical cover prevents chicks from roosting there. Pan-edge raised high to keep out dirt. Holds 3 gallons. A labor-saver that keeps chicks from getting soaked and chilled. No other Waterer with all these desirable features. Will take care of 100 to 150 chicks. No. 1655, \$1.85; postage 25 cts. extra.

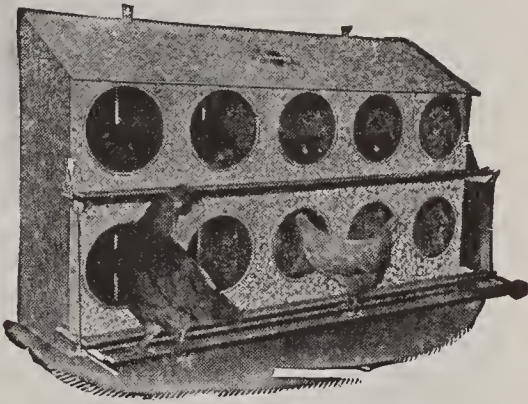


No. 1655 Waterer

Jamesway All-Metal Nests

LICE- AND MITE-PROOF

Put Jamesway All-Metal Nests in your poultry house and watch your hens side-step the old mite-infested wood boxes. The hard, smooth, sanitary, galvanized surface of Jamesway Metal Nests offers no place for parasites to hide and thrive. Jamesway All-Metal Nests are clean, sanitary, lice- and mite-proof, and easily cleaned. Simply swing them forward and upward. The back of the nest is open. Straw and shavings fall out, and the nest is cleaned. Swinging the perches up against the face of the nest prevents hens from roosting in the nest or on the perches. Raising the bottom perch automatically raises the upper one, an exclusive Jamesway feature.



Jamesway All-Metal Nests

No. 626. 6-Nest Unit (2 tiers, 3 ft. long).....	\$6 75	No. 635. 15-Nest Unit (3 tiers, 5 ft. long).....	\$14 40
No. 630. 10-Nest Unit (2 tiers, 5 ft. long).....	10 10	No. 831. Trap Attachment, extra, each 35 cts., doz.....	4 00

Jamesway Automatic Pressure Waterer

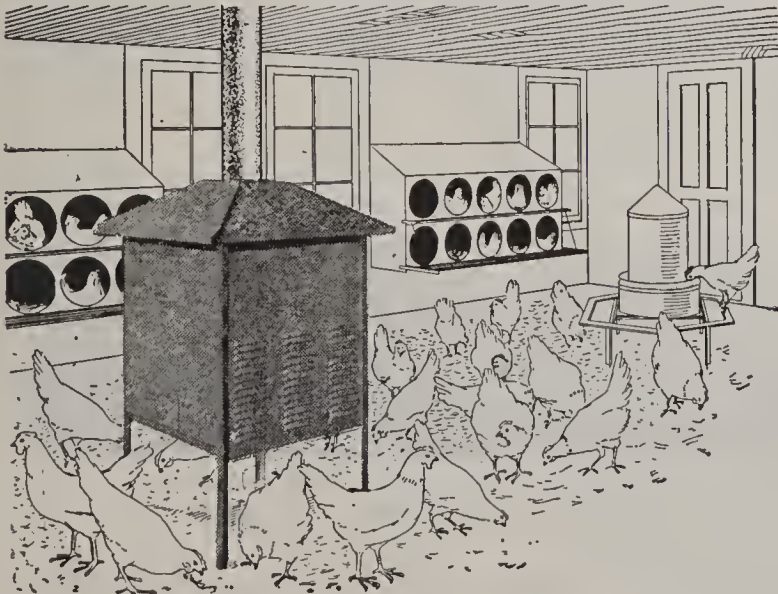
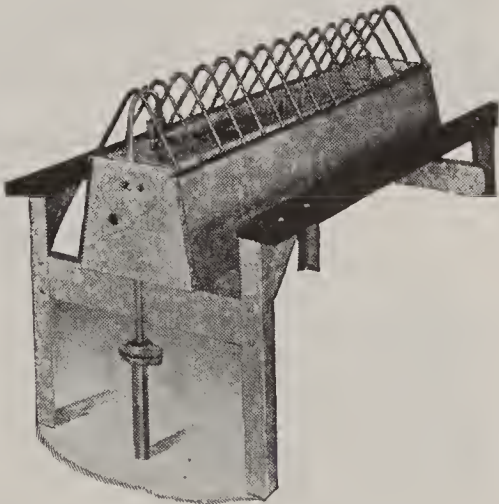
Poultrymen with running water will find this Automatic Pressure Waterer a valuable time- and labor-saver. Water-pan 8 inches wide by 46 inches long by 5 inches deep at center with a water-depth of 3½ inches. Copper float operating a brass valve maintains a constant level of fresh water. Valve may be adjusted to varying pressures. Overflow pipe and drain-plug in opposite end.

A hinged wire grill guard forces birds to lift their heads after drinking—a big help in keeping the floor dry. Grill wires spaced 2¼ inches apart.

Unit sets well up off the floor on sturdy angle-iron legs, making space under Waterer available for hens. Clear, sound wood perches well supported by brackets.

May be had with kerosene or electric heaters, or without. Kerosene-heated Waterers include burner; Electric-heated include cord and socket but no lamp.

No. 986. Without Lamp.....	Each \$6 95
No. 987. Kerosene-lamp heated.....	9 20
No. 988. Electric-lamp heated.....	9 60



Jamesway Poultry-House Heater

Heat in the poultry house has become recognized as one of the essentials for winter egg-production. Egg-slumps during cold weather are due principally to the effect that cold weather has on the birds. When a bird has to convert most of her feed toward maintaining a comfortable body condition, egg-production is bound to suffer. Feed is high at any price when used as fuel to keep the birds comfortable, and does little toward filling the egg-basket.

The Jamesway Poultry-House Heater is a substantial, fire-safe, all-metal cabinet 25 inches square, constructed of heavy-gauge copper-bearing galvanized sheets. Stands 14 inches off floor on strong, sturdy angle-iron legs that continue upward, forming the corners of the cabinet and supporting the slanting top. Front panel and top door lift off for operating brooder stove.

Inside may be placed any brooder that will fit into the cabinet. Either coal- or oil-stove may be used. Makes brooder stove duties twofold—helps get more eggs in winter and broods chicks in spring. No. 1194. Without stove. \$10. 4-gal. tank with brackets to attach to side of Heater, for use with oil-burning brooder, extra, \$4.



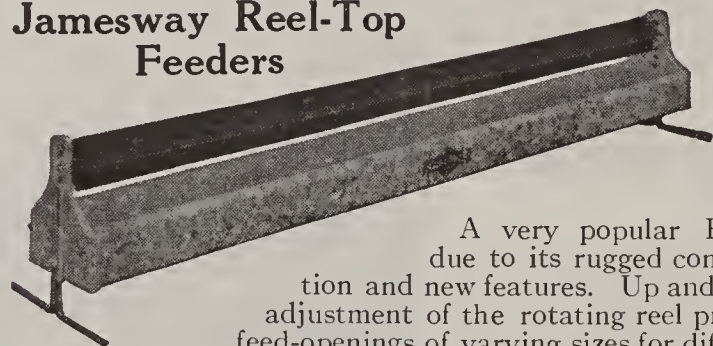
Moe's Leader Reel-Top Feeder

Has a Z-shaped all-metal reel, stiff and substantial, which revolves freely, prevents roosting and keeps the chicks out of the trough.

The reel is adjustable so it can be raised as the chicks grow larger. Width of trough 4 inches, depth at sides 2 inches, with turned-in edges to prevent waste. Total height 3½ inches.

	Length	Each	Postpaid	Doz.
No. 290.	24 in.....	\$0 35	\$0 45	\$3 80
No. 292.	36 in.....	45	55	4 90
No. 294.	48 in.....	60	75	6 50

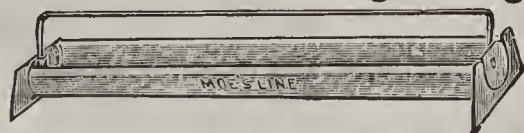
Jamesway Reel-Top Feeders



A very popular Feeder due to its rugged construction and new features. Up and down adjustment of the rotating reel provide feed-openings of varying sizes for different stages of chick-growth and prevent chicks from roosting on top of the Feeder. Adjustable wire legs permit Feeder to be raised or lowered for small chicks or growing birds.

	Price	Postpaid
No. 297. 36 in. long, 3½ in. wide, 1¾ in. deep. Capacity, 4 qts. Has "Z" type reel. For baby chicks.....	\$0 60	\$0 70
No. 292. 48 in. long, 4 in. wide, 2 in. deep. Capacity, 6 qts. 4-blade reel. For chicks and growing birds.....	95	1 00
No. 332. 46 in. long, 5½ in. wide, 3 in. deep. Capacity, 10 qts. 4-blade reel. For growing birds. 1 25	1 25	1 45
No. 499. 48 in. long, 8 in. wide, 4 in. deep. Capacity, 17 qts. 4-blade reel. For growing birds....	2 25	2 65

Moe's Dixie Feeding-Troughs



Made of best-quality galvanized steel. The half-round Trough is 3 inches wide and easily filled and cleaned. Fitted with a heavy wire top guard to keep the chicks out of the feeder, and this guard is adjustable so it can be raised as the chicks grow.

	Length	Each	Postpaid	Doz.
No. 460.	18 in.....	\$0 20	\$0 30	\$2 15
No. 462.	30 in.....	25	35	2 75

Moe's Round Baby-Chick Feeder

Made of best-quality galvanized steel. Chicks cannot get inside and contaminate the grain. Can also be used for water.

	Each	Postpaid	Doz.	Postpaid
No. 11. 8 feeder-holes	\$0 10	\$0 20	\$1 10	\$1 25
No. 12. 12 feeder-holes	20	30	2 20	2 40



Moe's Leader Chick Feeder

The pan and top are each made of a single piece of metal, no seams or solder used. Sliding top easy to fill and clean. Width of trough, 4½ inches at top. Made of galvanized steel.

	Length	Feeder-holes	Each	Postpaid	Doz.	Postpaid
No. 520.	13 in.	16.....	\$0 10	\$0 20	\$1 10	\$1 30
No. 521.	23 in.	32.....	20	30	2 20	2 50

Moe's Eclipse Feeding-Troughs

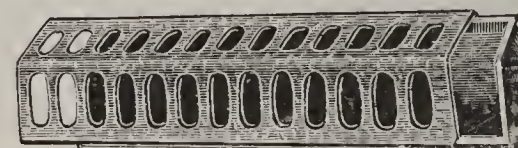


Made of galvanized iron and intended for chicks and growing stock. The pan and top are both stamped in one piece, no seams, rivets or solder used. Sliding top makes them easy to fill and keep clean. Width of trough, 4¼ inches at top.

	Length	Feeder-holes	Each	Postpaid	Doz.	Postpaid
No. 27.	13 in.	10.....	\$0 15	\$0 25	\$1 60	\$1 80
No. 28.	23 in.	20.....	25	35	2 70	2 95

Moe's Improved Double Chick Feeders

Sliding top

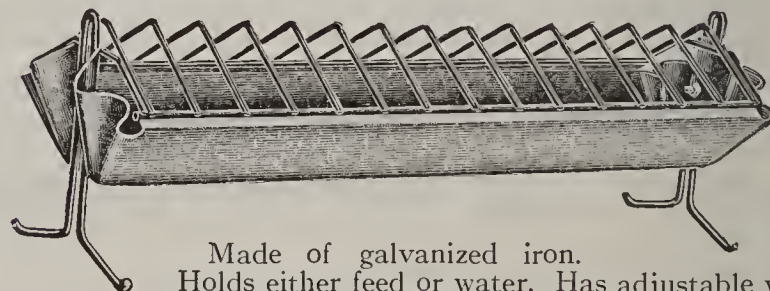


Easy to fill and clean

An excellent trough for feeding chicks. Made of best-quality galvanized steel, accurately stamped and formed with dies. Width of pan, 4 inches; depth at outer edge, 1 inch; total height, 3 inches.

	Length	Feeder-holes	Each	Postpaid	Doz.
No. 59.	18 in.	26.....	\$0 30	\$0 40	\$3 25
No. 60.	24 in.	36.....	35	45	3 80
No. 76.	36 in.	54.....	50	65	5 40

Keystone Wire Guard Feeder



Made of galvanized iron. Holds either feed or water. Has adjustable wire legs. Wire guard prevents chicks from getting into feed and is easily removed for cleaning and filling.

	Length	Width	Depth	Each	Postpaid
No. 130.	20 in.	4½ in.	2 in.....	\$0 45	\$0 50
No. 131.	30 in.	4½ in.	2 in.....	55	65
No. 134.	24 in.	5 in.	2¼ in.....	55	65
No. 135.	36 in.	5 in.	2¼ in.....	70	85

BABY CHICKS

You cannot afford to be too particular in the purchase of Baby Chicks, in knowing that they are from well-bred flocks and will develop true to type. Remember this—a Baby Chick is no better than the foundation stock from which it was hatched. We exercise extreme care in the selection of our Baby Chicks and supply only Chicks from selected matings and blood-tested flocks. We can supply all popular breeds. We also make a specialty of White Pekin Ducklings and Bronze Baby Turkeys. We suggest placing your order in advance, specifying the date you want delivery. Price-List gladly sent on request.



Moe's Star Jar Fountain and Feeder

Will fit pint, quart, or one-half gallon Mason jar

Manufactured of one piece of non-rusting metal. No parts to come unsoldered. Leaking impossible. Convenient, cheap, and sanitary. Provides greater drinking surface than the round fountain. Can be used for feed as well as water.

No. 32. Without jar.
10 cts. each, doz. \$1;
postage 20 cts. extra.



Moe's Mason Jar Fountain

Finest Fountain of its kind on the market. No solder used in its construction. Can be used for feed as well as water. Little chicks cannot drown. Will fit pint, quart, or 2-quart Mason jar. (Glass jars not furnished.) Diameter 6 in.

	Each	Doz.
No. 142. Heavy Terne Plate. . . .	\$0 10	\$1 00
No. 6. Dark Blue Porcelain. . . .	20	2 20

Postage 20 cts. extra



Kline Glass Jar Fountain

Pan made of heavy, clear glass. The jar-holder is made of steel and snaps onto the pan. Easy to fill and clean. Will fit any Mason jar. (Jar not furnished.) Can be used for buttermilk or medicines as well as water.

No. 10. 10 cts. each, doz. \$1; postage 20 cts. extra.



Keystone Single Wall Cleanable Fountain

An inexpensive Chick Fountain of good quality. To fill, invert can; bottom is then snapped on and held in place by a simple locking device. Pan is 1 3/8 inches deep and has 1 1/8-inch drinking-space around Fountain. Made of best galvanized iron.

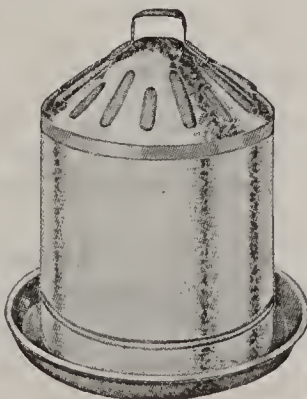


	Capacity	Each	Post-paid
No. 120.	1 gal.	\$0 50	\$0 60
No. 121.	2 gals.	75	90
No. 122.	3 gals.	90	1 05

Moe's Crescent Cleanable Fountain

Made with double walls which keep the water cool in summer and retard freezing in winter. Operates on the vacuum principle, no corks or floats, and the water automatically remains at the proper level in the pan without overflowing.

The top section telescopes snugly over the water container which is securely soldered to the pan. The top or outer section is also fastened securely so that the fountain may be carried by the handle without danger of spilling. A smooth cone top prevents roosting. Made of prime galvanized steel, easy to keep clean, inside as well as outside.

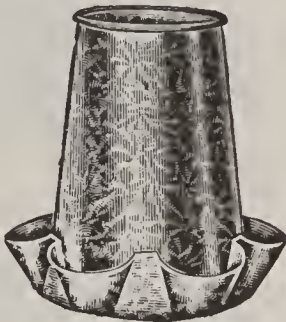


	Capacity	Diam. of pan	Each	Postpaid
No. 268.	1 1/2 gals.	11 in. . . .	\$1 05	\$1 20
No. 269.	3 gals.	13 in. . . .	1 60	1 80
No. 270.	5 gals.	13 in. . . .	1 95	2 20

Moe's Leader Gallon Fountain

Made of galvanized steel, in two parts. Easy to fill and keep clean. The round, taper-shaped body prevents any damage if accidentally frozen. Has a fluted drinking-pan, which prevents crowding and keeps chicks from getting into the pan. The flat top makes it easy to fill when inverted. An excellent Waterer for chicks and grown fowl, at a low price. Capacity, 1 gallon.

No. 530. 35 cts. each, postpaid 50 cts.;
6 for \$1.90, postpaid \$2.10.



Moe's Gem Chick Fountain

A good, inexpensive Fountain for chicks or grown fowl. Made of galvanized steel, accurately stamped and formed. Easy to fill and clean. The pan is 10 inches in diameter and of scalloped design, giving the chicks easy access to the water without crowding. Has a substantial top handle for carrying, and may be placed on the floor or hung from the ceiling up out of the litter as desired.



	Capacity	Each	Postpaid
No. 158.	1 gal.	\$0 55	\$0 65
No. 159.	2 gals.	75	90

MaKomb Top-Fill Fountain

A Top-Fill Fountain that is a time- and labor-saver. Intended for chicks from 1 day to 12 weeks old. The cone top is absolutely non-roosting. Outer can pulls off to fill, then an automatic spring valve closes off flow of water. Positive lock holds the outer can and makes carrying easy. Made of galvanized steel. All edges carry full strengthening roll. The smooth, round drinking-trough is just wide enough for real utility. Capacity, 3 gallons.

No. G6-23. \$1.60; postage 15 cts. extra.



MaKomb Float Fountain

A sanitary, easy-to-clean Fountain that provides for baby chicks a dependable supply of clean water. To fill, simply lift off the cone top. It uses a double-acting float-valve control that maintains the proper level in the drinking-pan and automatically shuts off the flow when pail is lifted. This is the original Pail Fountain. Capacity, 3 gallons.

No. G6-1. \$1.75; postage 15 cts. extra.



Moe's Feed and Water Cups

A practical and convenient Cup made to hang on the side of exhibition coops. Capacity about 1/2 pint.

Length, 4 1/2 inches; width, 3 inches; depth, 2 inches.

No. 61. 10 cts. each, doz. \$1.10; postage 25 cts. extra.

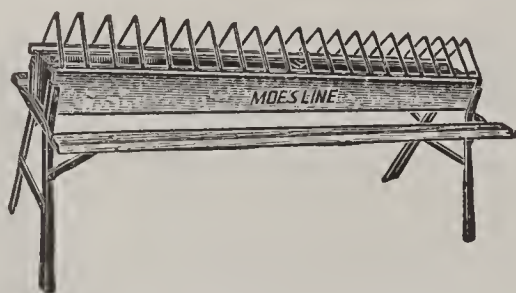


Jamesway Chick-Waterers

These are shown on page 133.

Jamesway Chick Feeders

Reel-top Feeders are shown on page 134. Another Jamesway Chick Feeder is shown on page 132.



Moe's Flock Feeder

Has heavy galvanized wire guards, spaced 3 inches apart, which prevent the hens from roosting on the Feeder. It also keeps them from crowding at the trough. Guard is hinged and can be thrown back for filling and cleaning. Trough is made of galvanized steel, and is 9 inches wide by 5 inches deep, with center partition, steel brace, and is securely bolted to the stand at each end. Stand is made of steel and has wide wood perches 15 inches from the floor. No. 375. \$4.20.

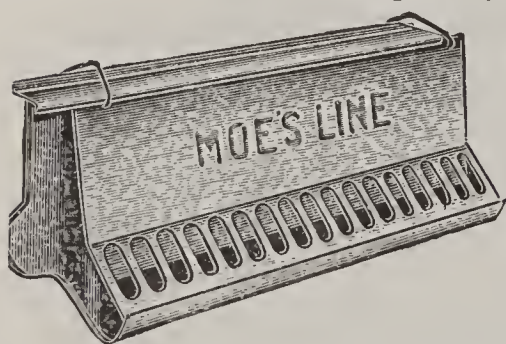
MaKomb Long Boy Feeder

Substantially built. Designed to save feed



An ideal large-flock Feeder. It is substantially built and will give years of service. The trough, made of heavy galvanized steel, is 10¼ inches wide and 5¼ inches deep and has "V" center so mash will be eaten down to the last billful. The grid guard is of special design and is made of heavy wire. Stand is made of heavy angles and perches are comfortably wide. Length 5 feet; height 26 inches; total width 24 inches. No. H6-105. \$4.50.

Moe's Big Boy Feeder

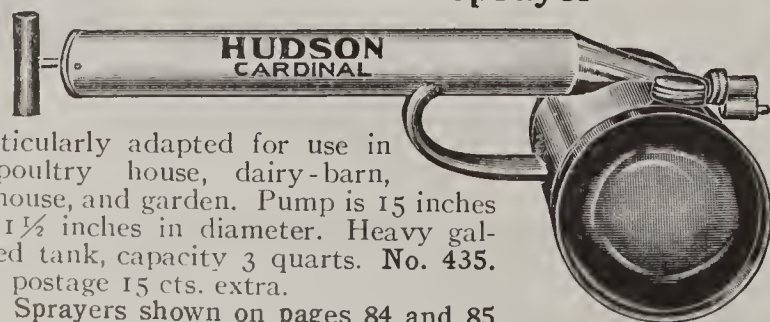


Especially designed for growing stock—three- to four-week-old chicks—and up to full-grown, mature fowls. Has a large capacity, with wide, good-sized Feeder openings. Makes an excellent Feeder for turkeys. The Feeder-holes are exactly the right shape and size to prevent waste, and yet give easy access

to a generous supply at all times. Has a capacity of about 75 pounds or 65 quarts of dry mash, with 17 openings on each side or a total of 34 openings. Can be placed on the ground or on a low stand or suspended by the two wire handles.

No. 160. Length 33 in., width 16½ in., height 14 in.\$2 00

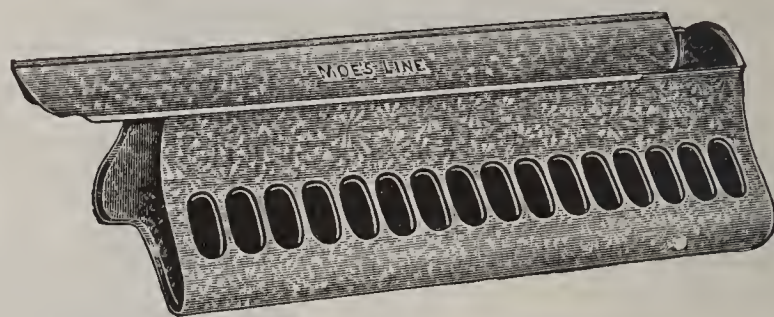
Hudson Cardinal Sprayer



Particularly adapted for use in the poultry house, dairy-barn, milk-house, and garden. Pump is 15 inches long, 1½ inches in diameter. Heavy galvanized tank, capacity 3 quarts. No. 435. \$1.35, postage 15 cts. extra.

Other Sprayers shown on pages 84 and 85

Moe's Large Capacity Feeder



A satisfactory Feeder for pigeons and young growing stock. The birds cannot roost on the cover or sides. Made of heavy galvanized iron.

Shipped completely assembled, ready for use.

			Post-paid
No. 140.	21 in. long; 8½ in. wide; 7 in. high. Capacity 10 qts. 16 openings on each side.	\$0 80	\$0 85
No. 141.	35 in. long; 8½ in. wide; 7 in. high. Capacity 17 qts. 27 openings on each side.	1 25	1 45
No. 141T.	Same as No. 141, except has tilting or swinging top so that chickens cannot perch on it.	1 50	1 70

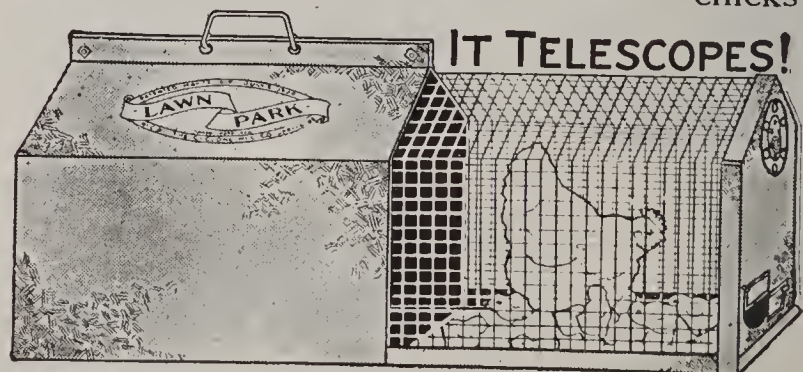
Moe's Dry-Mash Hopper



The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and the wires running from the flange through the wire grid prevent any chance of the fowls throwing out or wasting the feed. The sloping cover prevents the birds from roosting on the Hopper, and when both covers are closed, it is rat- and mouse-proof. A trial will convince you that it is a Hopper of the greatest merit. Manufactured of heavy galvanized iron in four sizes.

	Width	Capacity	Each	Postpaid
No. 35.	8½ in.	10 qts.	\$0 75	\$0 95
No. 36.	12 in.	14 qts.	1 25	1 45
No. 13.	18 in.	22 qts.	1 40	1 65
No. 37.	24 in.	32 qts.	1 50	1 75

The LAWN PARK Brood Coop SAVES THE CHICKS



Patented May 13, 1919

It is made entirely of galvanized materials, will not rust, and absolutely protects chicks against rats, cats, dogs, hawks, vermin, cold, storms, and all other chick enemies. The main part of the Coop is made from heavy galvanized steel, while the Park is made from galvanized wire screen, strongly reinforced with galvanized steel. The Lawn Park is large and roomy, being 18 inches wide, 19½ inches high, and 48 inches long, with Park extended. Coop has removable bottom for quick and easy cleaning. Price \$3 each.

Remo Rat Exterminator

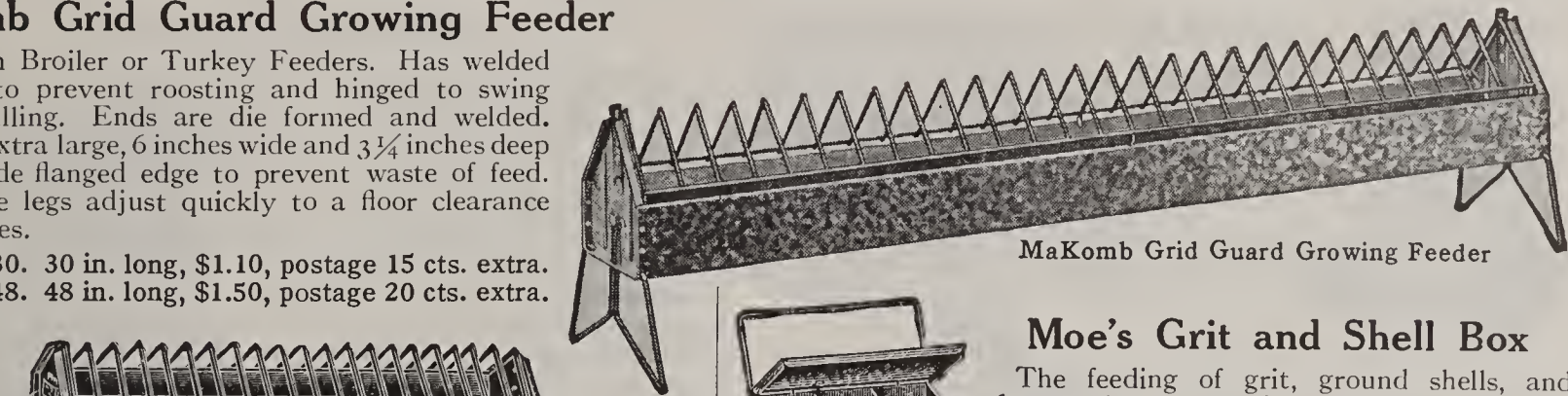
Positively will not harm domestic animals and poultry

A highly efficient Rat Exterminator in paste form. It attracts rats to the bait, making it more effective. Get rid of these filthy pests with Remo. 25-ct., 50-ct., and \$1 packages, postpaid.

MaKomb Grid Guard Growing Feeder

Latest in Broiler or Turkey Feeders. Has welded wire grid to prevent roosting and hinged to swing back for filling. Ends are die formed and welded. Trough is extra large, 6 inches wide and 3 1/4 inches deep and has wide flanged edge to prevent waste of feed. Heavy wire legs adjust quickly to a floor clearance of 4 1/2 inches.

No. H6-2030. 30 in. long, \$1.10, postage 15 cts. extra.
No. H6-2048. 48 in. long, \$1.50, postage 20 cts. extra.



MaKomb Grid Guard Growing Feeder

Moe's Grill-Top Broiler Feeder

For chicks from about three weeks old to pullet size. The heavy wire grill-guard prevents roosting, avoids food contamination, and prevents waste. Grill swings back for easy filling and cleaning. Trough is 6 3/4 inches wide by 3 inches deep. Total height, 6 1/4 inches.

Adjustable legs provide an up-and-down variation of 2 1/2 inches.

	Length	Each	Postpaid
No. 250-S.	36 in.....	\$1 15	\$1 30
No. 251-S.	48 in.....	1 45	1 65

Either Feeder without legs, 15 cts. less



Moe's Reel-Top Broiler Feeder

Same as Grill-top Feeder shown above, except has four-blade metal reel-guard instead of wire grill. The reel prevents roosting on the Feeder and has three adjustments to provide the proper space for various size chicks. Can be removed for filling and cleaning.

	Length	Each	Postpaid
No. 257-S.	36 in.....	\$1 15	\$1 30
No. 258-S.	48 in.....	1 40	1 60

Either Feeder without legs, 15 cts. less



MaKomb All-Age Feeder-Waterer

A large-capacity Feeder that can be used from the day-old to the broiler stage. As the chicks grow, the Feeder can be elevated by means of the adjustable legs. Ends are securely welded, then soldered. The reel prevents chicks from roosting on the Feeder and has two adjustments. Trough is 4 3/8 inches wide, and 2 1/4 inches deep.

	Length	Each	Postpaid
No. 536.	36 in.....	\$0 65	\$0 75
No. 548.	48 in.....	90	1 05

K-R-O Kills Rats

K-R-O cannot kill live-stock, pets, or poultry, yet is guaranteed to kill rates and mice every time.

Use K-R-O freely around the poultry-yard without danger to your flocks. Severest experiments have proved it safe. 2-oz. size, 75 cts.; 4-oz. size, \$1.25; 8-oz. size, \$2.

K-R-O ready mixed, 6-oz. size, 35 cts.; 22-oz. size, \$1, postpaid.

Moe's Grit and Shell Box

The feeding of grit, ground shells, and charcoal is recognized as an essential part of the diet, to keep fowls in healthy, prime condition. There is no more economical method of supplying grit, etc., than with these practical, inexpensive compartment boxes.

Can also be used as feed-hoppers for little chicks.

Made of heavy galvanized iron. Has 3 compartments, width 8 1/2 inches.

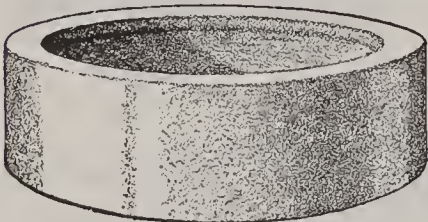
No. 9. 75 cts. each, postage 10 cts. extra.



Stoneware Feeders and Waterers

Made with heavy rolled edge to prevent waste of feed. White glazed. A suitable feed-or water-dish for dogs or rabbits.

No. 031.	2 1/2 in. deep x 7 1/4-in. diam.,	20 cts. each, \$2 per doz.
No. 041.	2 1/2 in. deep x 5 1/2-in. diam.,	15 cts. each, \$1.65 per doz.
No. 051.	2 1/2 in. deep x 6-in. diam. at top x 7 1/2-in. diam. at bottom,	20 cts. each, \$2 per doz.
No. 021.	3 1/2 in. deep x 6-in. diam.,	20 cts. each, \$2 per doz.



Stoneware Fountains and Feeders

	Two-piece Fountain	
	Made of best grade stoneware, highly glazed inside and out. Sanitary and easy to keep clean.	

PRICES for Fountains or Feeders:		
	Each	Doz.
Sanitary Milk Feeder		
1/4-gallon.....	\$0 30	\$3 25
1/2-gallon.....	35	3 75
1-gallon.....	45	4 85
2-gallon.....	85	9 25

Be sure to specify which is wanted, Fountains or Feeders. By freight or express only.

Ship orders 10 per cent additional for packing, minimum charge 25 cts.



Baby Chicks

For many years we have made a specialty of furnishing Day-old Chicks of all leading breeds. We supply only Chicks from selected matings and blood-tested flocks under state supervision. Price-list gladly sent on request.



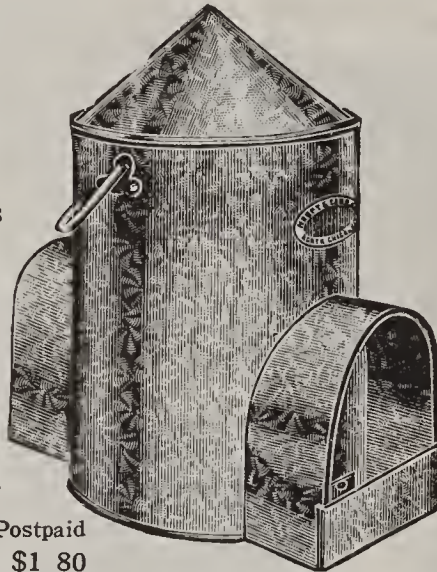
Moe's Bottom-Fill Fountain

The chicks cannot get into the basin to foul the water nor to drown, and will not roost on the top. They are easily cleaned, light and durable. The round taper shape prevents bursting from freezing.

		Each	Postpaid
No. 20.	2-qt.....	\$0 30	\$0 40
No. 24.	1-gal.....	40	55

Duplex Two-Pen Fountain

Made with drinking-spaces on two sides so one Fountain will serve two separate pens. The cover and inside body lifts off so that the entire inside of the Fountain can be easily cleaned. Removable cone top to prevent roosting. The drinking-spaces are protected with a hood to keep out dirt and rubbish. Made of prime galvanized steel. Each Postpaid



No. 218.	2-gal.....	\$1 65	\$1 80
No. 220.	5-gal.....	3 00	3 20



Duplex Fountain

An ideal Fountain for pigeons. Practical; sanitary. A double-wall fount, keeping the water clean and pure. Easy to fill. Easy to care for.

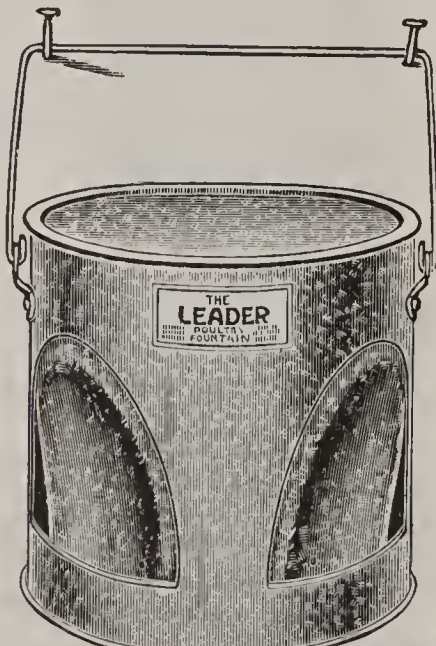
		Each	Postpaid
No. 210.	1-gal.....	\$1 15	\$1 30
No. 212.	2-gal.....	1 40	1 65

Leader Fountains



Pat. applied for

No. 200. 1½-gal. size, 85 cts.; postage 15 cts. extra



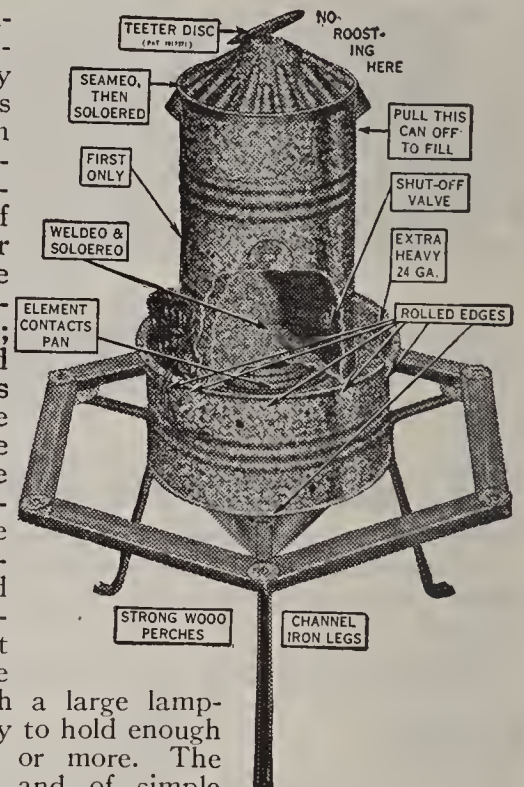
Pat. applied for

No. 202. 3-gal. size, \$1.50; postage 20 cts. extra

A sanitary Fountain, practical to use, easy to keep clean and well made of heavy galvanized steel.

MaKomb Fountains

Here is a line of Fountains of quality construction and large capacity priced to interest today's careful buyer. Made in two styles—vacuum-controlled and float-controlled. A simple valve of spring brass and rubber controls the water in the drinking-pan in the vacuum-controlled Fountain; in the float-controlled Fountain the float is mounted underneath the Fountain body, out of the way. These Fountains are built with the drinking-pan separate from the body. A loose drinking-pan is easier to clean, and the Fountain proper handles much better without a protruding pan. The Heater is furnished with a large lamp-bowl of sufficient capacity to hold enough oil to burn two weeks or more. The Stand is sturdily built and of simple design. Stand height, 14 inches.



Vacuum-controlled Fountain

No. 194.	5-gal. Fountain, without Heater.....	\$2 50
No. 208.	8-gal. Fountain, without Heater.....	3 30
No. 196.	5-gal. Fountain, with Lamp Heater.....	4 20
No. 209.	8-gal. Fountain, with Lamp Heater.....	4 95

Float-controlled Fountain

No. 104.	5-gal. Fountain, without Heater.....	\$2 35
No. 118.	8-gal. Fountain, without Heater.....	2 95
No. 65.	5-gal. Fountain, with Lamp Heater.....	4 00
No. 78.	8-gal. Fountain, with Lamp Heater.....	4 70
No. 13.	Stand for any of above Fountains, as shown in illustration.....	1 75

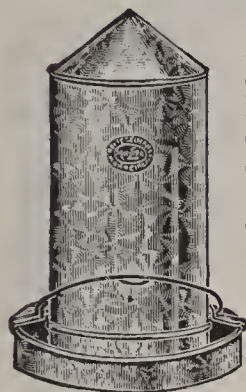
Keystone Insulated Double Wall Fountain

Made of heavy galvanized steel with insulated walls 2 inches thick, packed with sufficient insulating material to keep water warm in winter and cool in summer. Has strong handle and is easily filled by placing it on its side. Feeds water automatically, with no valves or complicated parts. In winter, fill at night with boiling water, keep in warm room and in the morning the water will be of the right temperature for the poultry. The hot water thoroughly heats the insulated walls during the night so freezing is retarded during the day. In summer fill with cold water, place in shady spot, and the water will remain cool all day.



No. 34.	2-gal. \$1.80, postage 25 cts. extra.
No. 35.	3-gal. \$2.50, postage 30 cts. extra.
No. 36.	5-gal. \$2.90, postage 40 cts. extra.

Moe's Monarch Cleanable Fountains



Fills from the top. Made of heavy galvanized steel, with double walls, which keeps the water cool in summer and retards freezing in winter. Feeds automatically; no valves to get out of order. Thoroughly sanitary and as easily cleaned as an ordinary pail. The outside cover has a heavy wire bail, so it can be used to carry water when filling the inside tank.

The side clips hold the pan securely in place when the Fountain is lifted or carried about by the top handle. Diameter of pans 13 inches.

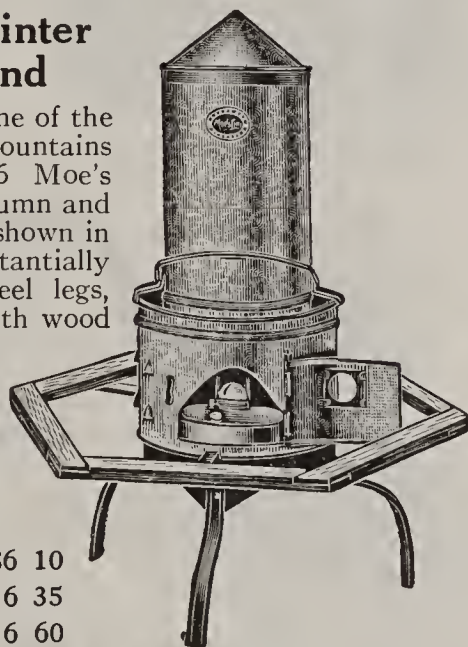
Has removable cone top which positively prevents roosting on top of the Fountain.

	Each	Postpaid
No. 283. 3-gal.....	\$2 25	\$2 35
No. 284. 4-gal.....	2 50	2 65
No. 285. 5-gal.....	2 75	2 90
No. 288. Stand (shown with Moe's Monarch Winter Fountain).....	1 85	1 95

Any Fountain without cone top, 15 cts. less. The No. 426 Moe's Heater described opposite can be used with any of these Fountains, making it an ideal Fountain for winter use.

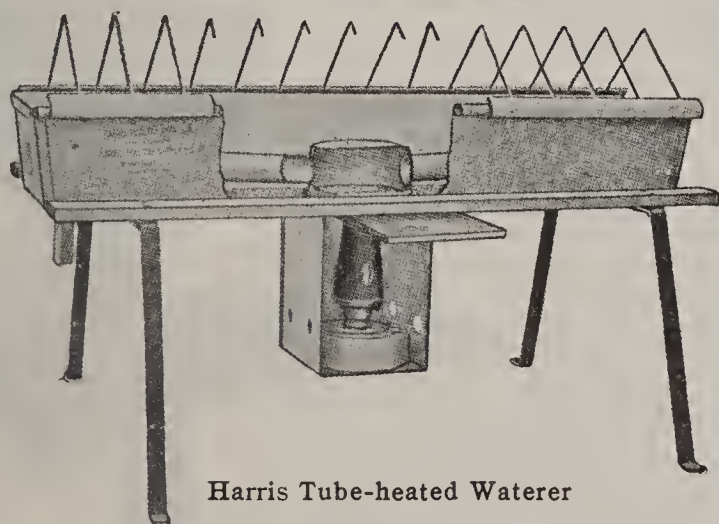
Moe's Monarch Winter Fountain on Stand

This is a combination of one of the Moe's Monarch Cleanable Fountains shown above, the No. 426 Moe's Heater described in next column and a Moe's Fountain Stand as shown in illustration. The stand is substantially made with heavy chanel steel legs, well braced and complete with wood perch-bars. The stand raises the Fountain off the floor, out of the litter, and takes up no scratching space. The wood perches are 14 inches from the floor.



With Heater and Stand

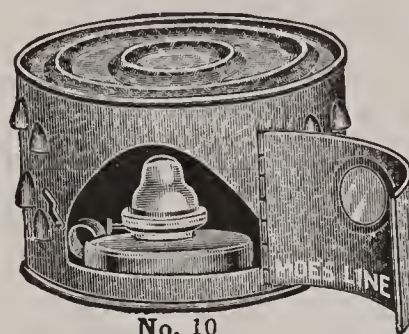
No. 421-S. 3-gal.....	\$6 10
No. 422-S. 4-gal.....	6 35
No. 423-S. 5-gal.....	6 60



Harris Tube-Heated Waterer

Harris Tube-Heated Waterer

A very efficient Waterer for warming water for poultry. Heater-box can be easily removed, adapting the Waterer for use on range in summer. Top guard prevents fowls getting wet and contaminating the water. The tank and fire-box are made of heavy rust-resisting copper-bearing metal. Tank holds nearly 10 gallons of water. Length, 42½ inches. Furnished with large lamp heater or burner for natural gas. Fountain, complete with either heater, \$5.



No. 10

The lamp-fount or bowl holds sufficient kerosene to burn continuously for seven days. Simple and safe. Two sizes. Postpaid
No. 10. Diam. 11 in., ht. 7 in. With closed top... \$1 75 \$1 85
No. 426. Diam. 13 in., ht. 9 in. With open top... 2 00 2 15



Little Putnam Stove

The Little Putnam Stove is used under the drinking vessel in the poultry-house to keep the water from freezing during the winter months. It is 8 inches in diameter and 4 inches high and is made of galvanized iron and

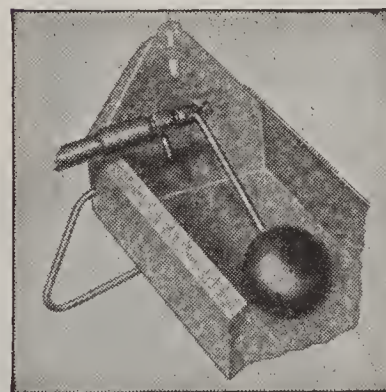
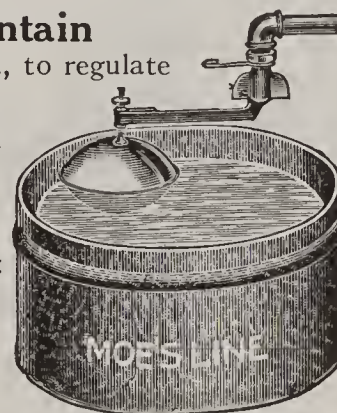
equipped with burner. The oil tank holds three pints of oil and burns three to four weeks without refilling or any other attention. The wick never needs trimming. \$2 postpaid.

Moe's Automatic Fountain

A perfect automatic valve and float, to regulate the flow of water to a drinking-dish.

The valve is threaded for ¼-inch iron pipe and can be attached to any iron water pipe, or to a barrel or tank, and insures a continuous, automatic supply of water, without waste.

No. 30. Automatic Valve and Float only. 85 cts., postpaid 95 cts.; doz. \$9.25.



MaKomb Float Control

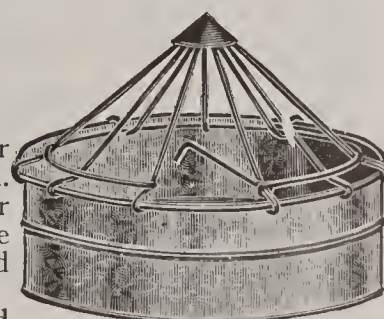
It automatically regulates the water-flow and can be used in almost any water-tight container. Simple and positive in action. Made of all brass, readily adjustable to various water levels or containers. Will handle almost any pressure No. 21. 90 cts., postage 10 cts extra.

Keystone Wire Guard Feeder or Waterer

A very satisfactory Fountain or Feeder. Sanitary and easy to clean. Wire guard prevents roosting or wasting of feed. Guard locks on the pan and can be carried when filled with feed or water.

Pan is made of heavy galvanized steel, 14 inches in diameter and 4¼ inches deep. Capacity, 2½ gals. water or 10 qts. of feed.

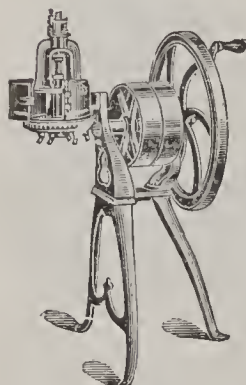
No. 103. 85 cts., postage 10 cts. extra.



Jamesway Poultry Waterers

A Jamesway Waterer in three sizes is shown on page 132. Another style is shown on page 133.

Mann's Green Bone-Cutters



The poultry-raiser wants eggs, and wants them when eggs are worth the most. Green bone and raw meat produce them. There is no doubt about that. Experience proves it; science shows why. Mann's Green Bone-Cutters have been sold for many years, and they are by far the best Bone-Cutters on the market today. Every machine is guaranteed, and must do the work. Send for complete Catalogue if you wish to know more about them.

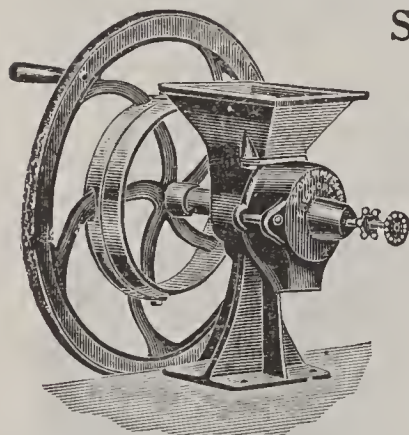
No. 5-B. Hand Bone-Cutter designed for small flocks. Weight 60 lbs. Price \$15.

No. 7 1/2. Combination Hand and Power. Can be run either way without change of parts. Weight 140 lbs. Price \$28.

No. 7. Hand Bone-Cutter designed for flocks of 25 to 100. Weight 107 lbs. Price \$19.75.

No. 11. Combination Hand and Power. Intended for large flocks when the machine must be run by hand a portion of the time. Price \$45.

No. 12. An all-power Bone-Cutter where large quantities of bone are to be cut. Capacity from 120 to 150 pounds per hour. Weight 261 lbs. Price \$65.



No. 35-B. Stover Hand and Power Mill

Stover Grinding Mill

In this Mill are embodied all the good features of other hand grinding Mills to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. This machine grinds oats, barley, rye, corn, peas, etc., for feeding to poultry. It is a well-designed machine, is strong and well made throughout and of excellent finish, has a 16-inch fly-wheel and is light running.

No. 32. Hand Power, capacity 1 to 2 bushels per hour. Price \$4.75.

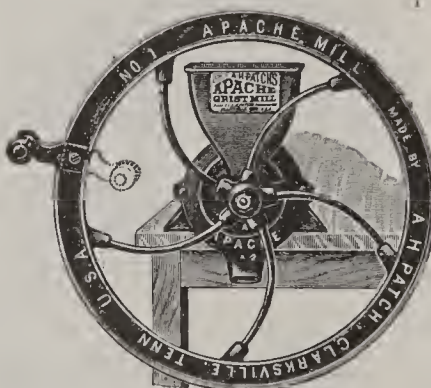
No. 35-B. Hand and Power, capacity 2 to 4 bushels per hour. Price \$9.25.

Apache Grist Mill

THE GRIST MILL WITHOUT A FAULT

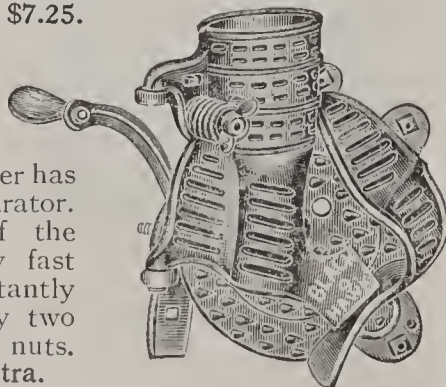
The Apache is an "all-round" Mill of large capacity, suitable not only for grinding chicken-feed, but ideal for making cornmeal, graham flour, rye flour, hominy, etc., for table use. It will grind a quart of meal in three minutes. Has perfect adjustment for fine or coarse work.

The large fly-wheel, large hopper, ball-bearings, and adjustable regulator, make the Apache the lightest running, fastest grinding, and most easily operated Mill on the market. Well built and will last a lifetime. Price \$7.25.

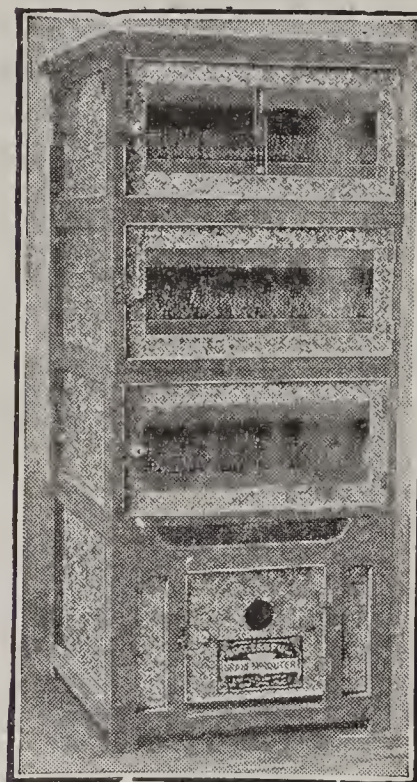


Black Hawk Corn Sheller

The Black Hawk Corn Sheller has enclosed hopper and separator. This prevents scattering of the shelled corn. A wonderfully fast and easy-running Sheller. Instantly fastened to barrel or box by two large strong clamps with wing nuts. Price \$2.75, postage 30 cts. extra.



"Successful" Grain-Sprouter



No. 3
"Successful" Grain-Sprouter

The feeding of sprouted oats is highly endorsed by poultry experts. Grain fed in a sprouted condition is easily digested and goes three times as far.

The walls, top, and bottom of the Successful Grain-Sprouter are constructed of 28-gauge galvanized steel. The framework is of 1 5/8 x 1 5/8-inch wood. Trays are made out of one solid piece of galvanized steel, punched with plenty of holes to provide drainage and ventilation. Furnished with safety lamp. Sprouter may be operated anywhere with absolute safety. Each tray holds 4 to 5 quarts of dry grain.

No. 1. Has 2 trays	.....	\$10 60
No. 2. Has 4 trays	.....	13 00
No. 3. Has 6 trays	.....	15 40
No. 4. Has 8 trays	.....	17 80
No. 5. Has 10 trays	.....	20 20
Additional sections with 2 trays, each		..... 3 60

Black Hawk Grist Mill



With a Black Hawk Mill you can crack corn or grind any kind of grain to whatever degree of fineness will best suit the age or condition of your fowls.

Grinds corn into meal, wheat into graham flour, rice or buckwheat into flour; in fact, an all-round household Mill that will grind fine or coarse. Price \$3.50.

Jumbo Power Feed Mill

Here's a Feed Mill That Grinds Ten to Twenty Bushels of Grain an Hour. Grinds the Grain Fine and Grinds It Fast

You can grind oats, rye, barley, shelled corn, and wheat with little power and at practically no cost. Simple screw adjustment enables you to grind grain just as fine or as coarse as your needs demand.

Built of steel and iron throughout, with long and well-babbitted bearings. Safety springs protect burrs from nails, nuts, etc., and keep burrs apart when machine is running empty.

One set of fine burrs, also one set of coarse burrs furnished with each machine. Pulley 6-inch diameter by 3 1/2-inch face, gives proper speed for operation with any engine or light plant. Speed 290 to 1,150 R. P. M. Burrs 6 inches. Weight 90 pounds. Height 33 inches. Power required, 1 1/2 to 5 Horse Power. Price \$13.



Larger Grinding Mills are shown on page 113



Banner Root-Cutter

Vegetables, such as cabbage, carrots, turnips, mangels, beets, and potatoes, furnish the essential green-food vitamins during the winter months. With a **Banner Cutter** to quickly and easily cut and shred vegetables, the poultry-raiser is fully equipped to keep up his green-fed rations during the winter months. Enough feed for a large flock of birds can be cut in two to five minutes. **No. 7. \$7.25.**

Buch's Hand Feed-Cutter

A durable Cutter of simple design and low in price. It has an 11-inch, tempered, curved knife, which can be adjusted to take up all wear, thus insuring a perfect shear-cut at all times. Has gauge plate adjustable to any length of cut desired up to 3 inches. Cuts either green or dry fodder. Weight, 50 lbs. Price \$7.50.

Other Feed-Cutters shown on page 112.



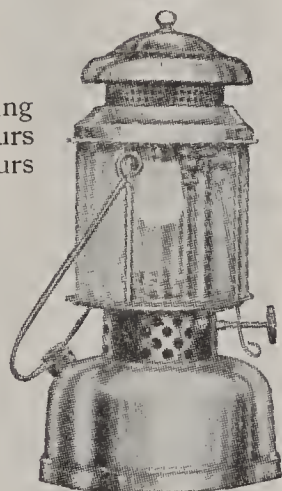
Storm King Lantern

350 CANDLE-POWER

Get more eggs by hanging a Storm King Lantern in your poultry-house a few hours each night and morning—longer feeding hours increase the egg-yield.

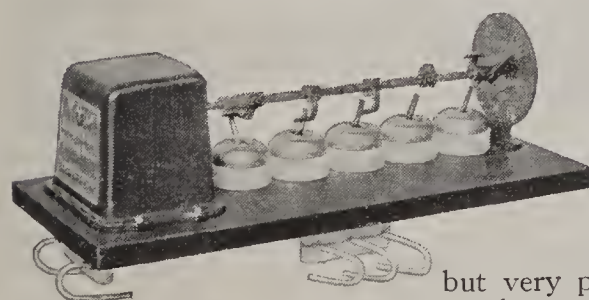
The Storm King makes and burns its own gas from common motor gasoline. Absolutely safe. Burns in any position and in any wind.

Capacity of fount, 1 quart—burns 12 to 15 hours on one filling. Height 13 inches, weight 4 pounds. Equipped with Mica Chimney, 1 No. 1A Rag Mantle, and all accessories. Price \$5.75, postpaid.



The Never-Fail Electric Time Switch

KEEP YOUR HENS ON THE JOB IN THE WINTER



This simple but remarkable device automatically turns electric lights on or off at the exact time you wish it done. Cams on a cam-shaft connected to a small

but very powerful and durable synchronous motor throw the switches, turning the light on or off, bright or dim, just as you desire. Can be located in the home or any other building. For use with alternating current, 120 volts. Complete instructions are sent with each machine.

- No. 11. Turns bright lights on or off. One operation....\$13 50
- No. 22. Turns bright lights on and off. Two operations.. 15 00
- No. 33. Turns bright and dim lights on and off. Four operations..... 16 50
- No. 55. Controls bright and dim lights evenings and bright lights mornings..... 18 50

The Lyon Roost Insulator



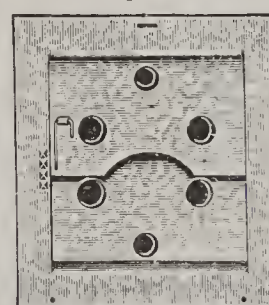
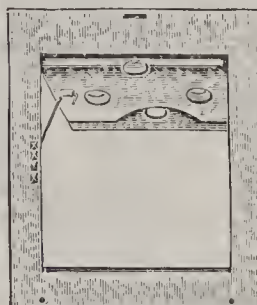
Its application is best explained as follows: An upright support, perhaps 1 1/2 or 2 inches square and of any desirable height, is used for each end of roosts. Holes are bored in at the top of these supports large enough to allow the Insulator to fit tight and deep enough to allow bottom of Insulator bell to rest on square top of upright.

The roost-pole is then bored to fit tight on top of Insulator and deep enough to allow it to rest on the small shoulder provided for that purpose.

The bell-shaped cup is then kept partially filled with kerosene oil which either traps and destroys the vermin or turns them back in their travels up the supports towards the roost.

One Pair.....	\$0 25	Postpaid \$0 35
Six Pairs.....	1 25	1 45

Moe's Trap Nest Front



An inexpensive and useful device which meets a popular demand.

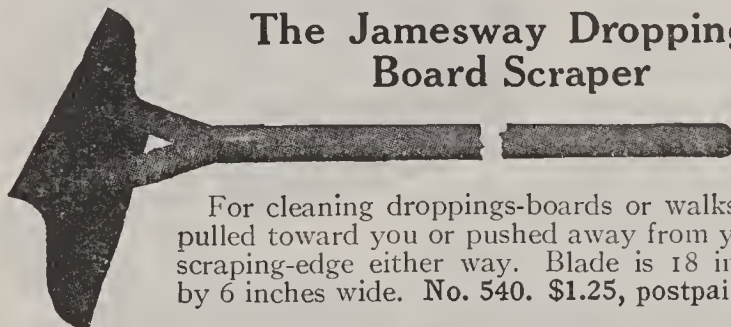
Made of best quality galvanized iron, simple in operation, with no small loose parts to get out of order.

Can be easily fitted to an ordinary wood-box or coop. Suitable for any breed of fowl. Effectively traps the hen, yet allows ample ventilation.

Door is hinged, making it easy to remove the hen or clean the nest. 11 in. wide by 12 in. high. Size of opening 8 in. by 9 in.

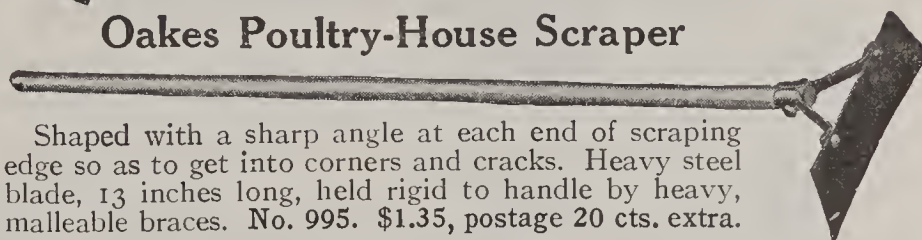
No. 63. 55 cts. each, postpaid 60 cts.; \$6 per doz., postpaid \$6.35.

The Jamesway Droppings Board Scraper



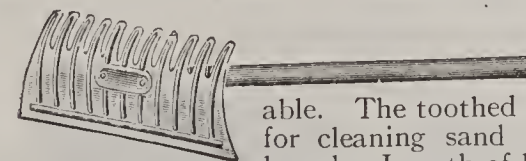
For cleaning droppings-boards or walks. Can be pulled toward you or pushed away from you. Keen scraping-edge either way. Blade is 18 inches long by 6 inches wide. No. 540. \$1.25, postpaid \$1.35.

Oakes Poultry-House Scraper



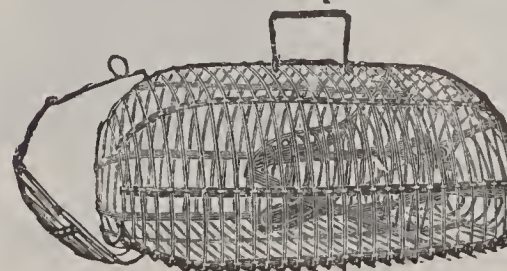
Shaped with a sharp angle at each end of scraping edge so as to get into corners and cracks. Heavy steel blade, 13 inches long, held rigid to handle by heavy, malleable braces. No. 995. \$1.35, postage 20 cts. extra.

Moe's Handled Scraper



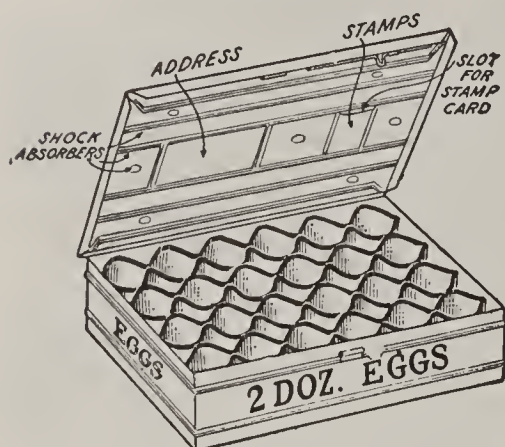
Made of hard, stiff steel. Light in weight, yet strong and durable. The toothed or rake edge is excellent for cleaning sand or sifted ashes on drop boards. Length of blade 9 1/2 inches; width 4 inches; with 30-inch hardwood handle securely riveted to the blade. No. 51, Handled Scraper, 35 cts. each; postpaid, 45 cts.

Surprise Rat Trap



This Trap is very strongly made, having more stiffening ribs and cross-wires than Traps of similar pattern. Made of No. 17 coppered wire, 16 in. long, 9 in. wide, 7 in. high. 85 cts., postpaid \$1.

Aluminized Metal Egg-Crates



This is the New Model with the metal edged filler and it is a wonder. Solves every problem of shipping eggs and butter and other soft products by mail. Built for continued use; practically indestructible; lasts for years. No wrapping is required. A permanent lock pin attached to the crate holds the lid rigidly closed. Reversible address cards

are placed over eggs, address visible through opening in lid. Names of shipper and receiver are placed on each side of this card.

	Weight without eggs	Each	Postpaid
1-dozen size	2 lbs.	\$1 00	\$1 10
2-dozen size	3 lbs.	1 25	1 36
3-dozen size	4 lbs.	1 50	1 62
4-dozen size	5 lbs.	1 75	1 88
6-dozen size	6 lbs.	2 00	2 14
12-dozen size	11 lbs.	3 00	3 19

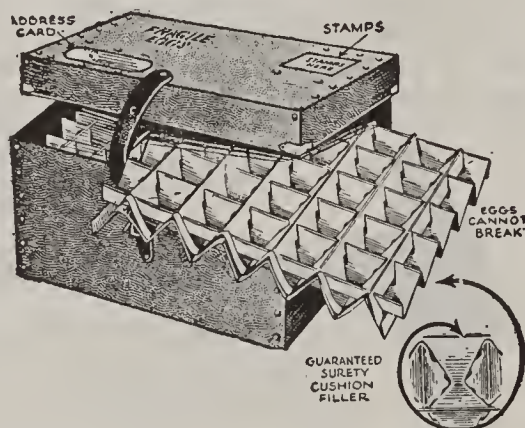
"Egg-Pak" Fibre Egg-Case

ELIMINATES ALL EGG-BREAKAGE

Made of indestructible fibre, riveted together like steel girders. It cannot break or dent. Stand on it and see. Eggs shipped in "Egg-Pak" will always arrive in the same condition in which they left. Patented reversible address card holder and stamp space makes "Egg-Pak" intermailable.

The patented "Surety Cushion" fillers in "Egg-Pak" hold any size egg separately in a cushion compartment.

Easily closed by the use of a genuine cowhide strap and buckle piece. May be sealed through buckle, if required. Buckle cannot open in transit.



	Weight without eggs	Each	Postpaid
2-dozen size	2 1/2 lbs.	\$2 00	\$2 11
4-dozen size	3 1/2 lbs.	2 55	2 67
6-dozen size	4 lbs.	2 85	2 97
8-dozen size	5 lbs.	2 95	3 08
12-dozen size	6 1/2 lbs.	3 65	3 80

Extra trays, 24-25-egg size, 25 cts. per tray.

Blue Ribbon Chick Box

A safe and convenient carrier for shipping baby chicks either by express or parcel post. Made according to Association standards and are full 5 1/2 inches in depth. Prices include staples, ready for assembling.

25-Chick size. 11 x 9 x 5 1/2 in.
15 cts. each, postpaid 25 cts.;
doz. \$1.25, postpaid \$1.50.

50-Chick size. 18 x 11 x 5 1/2 in.

20 cts. each, postpaid 30 cts.; doz. \$1.90, postpaid \$2.20.

100-Chick size. 22 x 18 x 5 1/2 in. 25 cts. each, postpaid 35 cts.;
doz. \$2.85.

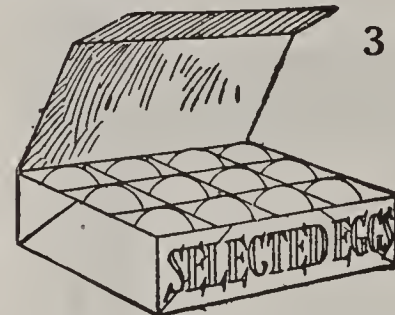


2 x 6 Folding Egg Cartons



Market your eggs in this first-class Egg Carton. Holds one dozen eggs and made with full-cushion filler, giving full protection to the eggs and long front flap, which gives a rigid top to the box. Can be used with the Successful Handy Egg-Crate, Humpty Dumpty Crate, or 30-dozen regulation egg-case. Not suitable for parcel post use.

	Postpaid	Postpaid
12 Cartons.....	\$0 25 \$0 35	250 Cartons...\$2 90 \$3 50
50 Cartons.....	85 1 05	500 Cartons... 5 50 6 60
100 Cartons.....	1 50 1 80	1,000 Cartons...10 50 Not ppd.



3 x 4 Folding Egg Cartons

One-dozen size. No printing

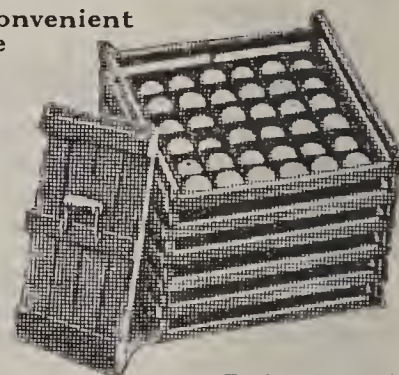
This is the regulation Folding Egg Carton, used where eggs are delivered direct to customers. It is not a parcel-post box. They are also used as fillers for the Successful Handy Egg-Crate.

	Postpaid	Postpaid
12 Boxes.....	\$0 15 \$0 25	125 Boxes ... \$1 00 \$1 25
50 Boxes.....	50 70	250 Boxes ... 1 60 2 05
		500 Boxes ... 3 00 3 85
		1,000 Boxes ... 5 50 Not ppd.

Humpty Dumpty Egg-Carrier

The Best, Cheapest and Most Convenient Egg-Carrier in Existence

Equipped with Safety Cushion Flats which practically eliminate breakage. Constructed to withstand hard knocks; easy to pack and unpack, easy to carry, and insures accurate count. Can be used over and over again. Very popular with farmers and poultry raisers. Furnished complete with fillers.



	Each	Postpaid	Each	Postpaid
3-dozen size....	\$0 45	\$0 55	15-dozen size....	\$0 65 \$0 85
6-dozen size....	55	65	30-dozen size....	1 00 1 25
12-dozen size....	60	75		

Egg-Case Fillers, 20 cts. per doz., postpaid 30 cts. Case of 125 three-dozen size fillers, \$1.25.

Cushion Flats, 20 cts. per doz.; \$1.25 per 100, postpaid \$1.50. These can also be used in the regulation Egg-Cases.

Cel-O-Glass

Use Cel-O-Glass for more eggs all winter long. Cel-O-Glass brings the all-important ultra-violet rays indoors; keeps houses warmer, prevents rickets, reduces chick losses.

This time-tested profit-maker for poultry raisers and farmers is now guaranteed to give 5 years' service when correctly installed.

	36-in. width	28-in. width
100 lineal-foot roll.....	\$40 50	\$31 50
50 lineal-foot roll.....	20 75	16 25
25 lineal-foot roll.....	10 65	8 40
10 lineal feet.....	4 50	3 50
5 lineal feet.....	2 40	1 90

Cel-O-Glass Refix. For repairing punctures in Cel-O-Glass.
1/2 pt. 45 cts.; pt. 75 cts.

Genuine Glass Cloth

A strong fabric treated by a patented process to make it translucent, weather-proof, and water-proof. It readily transmits the life-giving vitalizing ultra-violet rays of the sun. These are the health rays of sunlight and are absolutely needed by poultry in winter months. Easily put up. In rolls 36 inches wide.

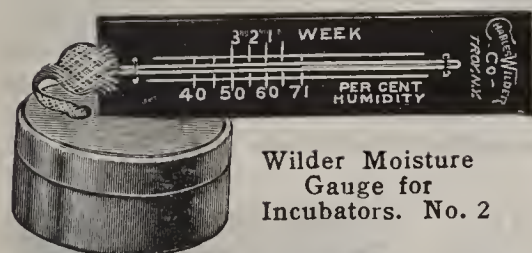
100-yd. roll, 900 sq. ft..	\$25 00	15-yd. roll, 135 sq. ft....	\$3 90
50-yd. roll, 450 sq. ft..	12 50	10-yd. roll, 90 sq. ft....	2 70
Less than 10 yds., per yd.....			30

Incubator and Brooder Extras

	Each	Postpaid
No. 1 Lamp Bowl, capacity 1 pt.....	\$0 50	\$0 60
No. 2 Lamp Bowl, capacity 1 qt.....	60	70
No. 3 Lamp Bowl, capacity 2 qts.....	75	85
No. 1 Zenith Burner. Uses $\frac{5}{8}$ -inch wick.....	50	55
No. 2 Zenith Burner. Uses $\frac{7}{8}$ -inch wick.....	75	70
No. 3 Zenith Burner. Uses 1 $\frac{1}{2}$ -inch wick.....	1 00	1 05
Metal Chimney.....	15	20
Nos. 1 and 2 Wicks. Dozen.....		30
No. 3 Wicks. Dozen.....		40
Red Felt Wicks. $\frac{5}{8}$ -in. width. Dozen.....		25
Red Felt Wicks. $\frac{7}{8}$ -in. width. Dozen.....		45
Red Felt Wicks. 1 $\frac{1}{2}$ -in. width. Dozen.....		55
Lamp Bowl for Buckeye Standard Incubators....	1 00	1 10
Lamp Burner for No. 65 Buckeye Incubator.....	75	80
Lamp Burner for Nos. 66, 67, 68 and 69 Buckeye Incubators.....	1 00	1 05
Lamp Chimney for Buckeye Standard Incubators.....	50	55
Gas Burner for No. 65 Buckeye Incubator.....	2 00	2 15
Wafers for Wafer Regulator, 3-in.....	30	35
Wafers for Wafer Regulator, 4-in.....	40	45
Wafers for Wafer Regulator, 5-in.....	50	55
Wick for No. 27 Buckeye Blue Flame Brooder...	40	45
Wick for No. 28 and No. 29 Buckeye Blue Flame Brooder.....	65	70

Thermometers and Hygrometers

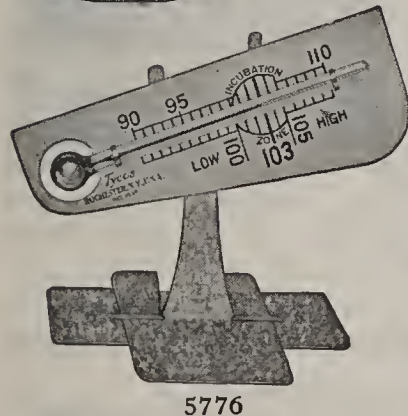
FOR INCUBATORS AND BROODERS. ACCURATE AND DEPENDABLE



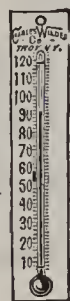
Wilder Moisture Gauge for Incubators. No. 2



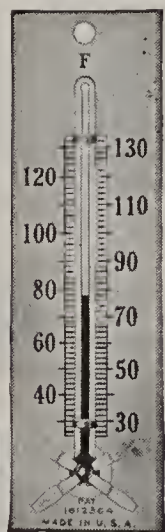
1046



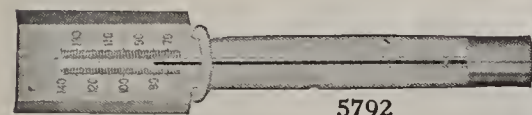
5776



1112



5794



5792



1123

No. 5776. Taylor Incubator Thermometer, with stand.....	\$0 90	\$1 00
No. 1046. Buckeye Incubator Thermometer.....	70	80
No. 91. Buckeye Universal Thermometer. (Not illustrated.).....	75	85
No. 5794. Taylor Brooder Thermometer.....	60	70
No. 5792. Taylor Brooder Thermometer.....	90	1 00
No. 1112. Wilder Brooder Thermometer.....	55	65
No. 1123. Wilder Brooder Thermometer.....	95	1 05
No. 2. Wilder Moisture Gauge.....	1 35	1 45
No. 5796. Tycos Incubator Hygrometer.....	1 75	1 85

Roofing

When you need roofing or roofing paint, remember we have it. See page 117.

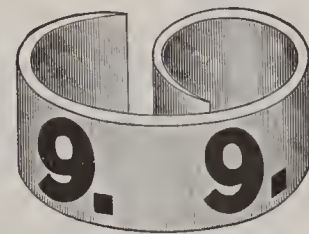
Bandettes (Colored Celluloid Leg-Bands)

COLORS ARE FAST AND WILL NOT FADE

Bandettes are easily and quickly applied. Simply open out band, hook it on leg, and allow it to close. Made of special spring celluloid and will close up to the original size.

Furnished in six colors—Blue, Red, Yellow, Green, Cerise (Pink), and White.

Sold only in unbroken sets of 25 of one color.



No. 4. For Baby Chicks. Numbered 1 to 500.

No. 6. For Pigeons. Numbered 1 to 500.

No. 9. For Leghorns. Numbered 1 to 3,000.

No. 11. For American Breeds. Numbered 1 to 2,000.

No. 12. For Asiatics. Numbered 1 to 500.

Nos. 4 and 6	Postpaid	Nos. 9, 11, and 12	Postpaid
25 Bands.....	\$0 40	25 Bands.....	\$0 60
50 Bands.....	70	50 Bands.....	1 00
100 Bands.....	1 30	100 Bands.....	1 80
250 Bands.....	3 10	250 Bands.....	4 35
500 Bands.....	6 00	500 Bands.....	8 50

Perfecto Spiral Leg-Bands

KNOW YOUR HENS ON SIGHT

In ten colors—Red, Green, Amber, Black, White, Pink, Yellow, Ruby, Light Blue, and Dark Blue.



Mark each bird for its pen. Give each pen a different color. Mark old birds and pullets differently and know what you are doing.

No. 0. $\frac{7}{8}$ -in. diam. for Turkeys.

No. 1. $\frac{3}{4}$ -in. diam. for Asiatic Breeds.

No. 2. $\frac{11}{16}$ -in. diam. for American Breeds.

No. 3. $\frac{1}{2}$ -in. diam. for Leghorns.

No. 4. $\frac{7}{16}$ -in. diam. for Bantams.

No. 5. $\frac{1}{4}$ -in. diam. for Pigeons.

No. 6. $\frac{1}{4}$ -in. diam. for Baby Chicks.

Spiral Leg-Band	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Prices, postpaid							
25 Bands	\$0 30	\$0 25	\$0 20	\$0 20	\$0 15	\$0 15	\$0 15
50 Bands	50	40	35	30	25	20	20
100 Bands	90	70	60	50	45	35	35
500 Bands	4 00	3 25	2 75	2 25	1 75	1 50	1 45
1,000 Bands	7 50	6 00	5 00	4 00	3 00	2 50	2 40

Colored Leader Adjustable Leg-Bands



For a general purpose Band that provides quick and accurate identification, this Colored Leader cannot be equaled. It will fit anything from Bantam to Cochins, or Tom Turkey or Goose. Continuous line of color around the band so that a bird can be distinguished, so far as brood or pen is concerned, from a distance.

Furnished in Red, Blue, Green, White, Yellow, or Pink. Not numbered above 200. Prices postpaid.

12 Bands....	\$0 30	50 Bands....	\$1 00	500 Bands....	\$6 50
25 Bands....	60	100 Bands....	1 50	1,000 Bands....	12 50

Moe's Aluminum Leg-Bands



Made of sheet aluminum, with large raised numbers, easy to read from a distance. Adjustable for any size fowl. Accurately made and quickly applied.

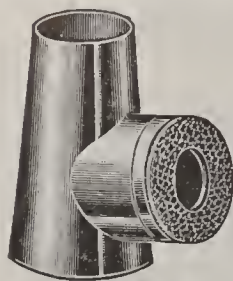
Packed in paper cartons of 12, 25, 50 and 100 Bands each. Numbered from 1 to 9,999. Prices postpaid.

12 Bands.....	\$0 15	100 Bands.....	\$0 65
25 Bands.....	25	500 Bands.....	3 00
50 Bands.....	40	1,000 Bands.....	5 50

Seamless Leg-Bands (Pigeon Sizes Only)

Made of pure aluminum and well finished. Three sizes, Nos. 1, 2, and 3. Prices postpaid.

12 Bands....	\$0 30	50 Bands....	\$1 00	500 Bands....	\$6 00
25 Bands....	60	100 Bands....	1 50	1,000 Bands....	10 00



Moe's Egg-Tester

Used with an ordinary lamp (No. 2 burner) in a dark room.

It will illuminate the interior of the egg, and show if the chick is alive, and also show the size of air-cell in the egg.

No. 48. Moe's Egg-Tester. 25 cts. each, postage 10 cts. extra.

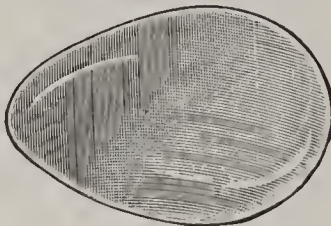
Glass Nest-Egg

Natural in appearance and uniform in size. Will not easily break.

They induce the hen to lay where she should—in the nests provided for her.

Hen size, 4 for 10 cts.; 20 cts. per doz.; postpaid, 30 cts. per doz.

Pigeon size, 5 cts. each; 40 cts. per doz.; postpaid, 50 cts. per doz.



Lime Nest-Egg

They look like real hens' eggs. Made from pure sterilized sulphate of lime. This product is well known among poultry-raisers for its value in keeping nests in a clean, healthful condition.

They do not break or crumble or absorb and hold the cold. Price, 3 for 10 cts.; 30 cts. per doz.; postpaid, 40 cts. per doz.

Oakes Egg-Cooling Basket

For gathering and quick cooling of eggs. The quicker the eggs can be cooled, the better they will be. Clean, fresh-flavored eggs always bring premium prices. Store eggs in wire Cooling Baskets in a room temperature of 60 degrees for best results.

Made of galvanized wire with perforated metal bottom. Very sturdy and substantial. No. 15. 80 cts. each, postage 10 cts. extra; 6 for \$4.35.



Clay Pigeon Nests

Unglazed

9-in. diameter, 20 cts. each, doz. \$2.15.



Moe's Pigeon Nests

Made of galvanized iron. Diameter 8 inches, with a small hole punched in center so it can be tacked to a board. Generally used in pairs.

Light in weight, yet substantial, and easily cleaned.

No. 107. Pigeon Nests, 15 cts. each, postpaid 20 cts.; \$1.60 per doz., postpaid \$1.75.

The Pittsburgh Shipping Coop



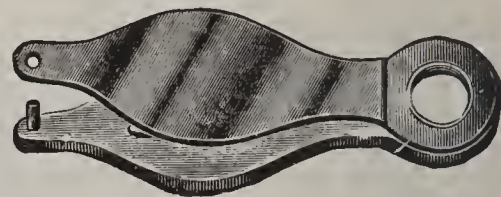
The most serviceable, sanitary, and durable Shipping Coop on the market. Made of the best galvanized steel bars and wire electrically welded together and sufficiently stayed to make it rigid throughout. The bottom is made of the best seasoned wood and is assembled by the floor-boards being stapled to three cross sections and reinforced with cleats on top.

No. 1204. Standard Size. 27 x 41 x 14 inches high. \$3 25

No. 1203. Turkey Size. 27 x 41 x 20 inches high. 3 75

Moe's Standard Poultry-Punch

A practical Punch for marking baby chicks. All steel, nickel-plated, punches clean, hole is right size, will not bruise the foot. Price 15 cts., postpaid.



Moe's Ideal Poultry-Punch

An improved Punch, scissors type. Works easily, cuts cleanly, and does not pinch the foot.



Convenient to carry in vest-pocket and the lower end is an excellent cigar cutter.

Nickel-plated finish. Length 3½ inches. No. 39. 35 cts., postpaid.

Caponizers

Large profits await the raiser of capons. Pilling's instruments are the acknowledged leaders in this line.

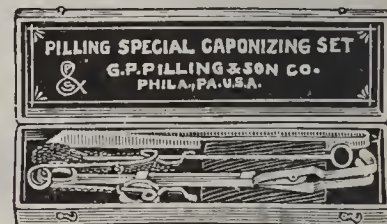


New Philadelphia Caponizing Set

This set has many admirers. It consists of a knife, for making the incision; the spreader, for holding sides open; sharp hook, for piercing skin; the Lansdowne Remover, for removing the testicles. Cords with hooks are for holding the bird. Cup forceps for removing any foreign matter. Prices (postpaid), in velvet-lined case \$3.50; in pasteboard box \$3.

Pilling Special Caponizing Set

The finest set in the world for the price. It is used just the same as other Caponizing Sets, except that the Testicle Remover cuts, like a pair of scissors, the cord of the testicle clean and clear as a whistle. The instruments in this set are put up in oak case sent postpaid with full, easy-to-use directions on receipt of \$5, postpaid.



Superior Rural Mail-Box



This Mail-Box is of the highest standard of workmanship and excellence of finish. Substantial, and operates perfectly. It is absolutely proof against all weather. Finished in weather-proof aluminum bronze. Made of 18- and 20-gauge galvanized steel, and is 23⅜ inches long, 11 inches wide and 13⅜ inches high. Conforms to the latest postal regulations. \$2.50, postpaid.

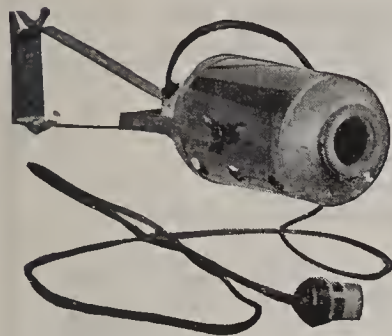
Superior Suburban Mail-Box

Opens at end, hinged at bottom and equipped with automatic steel hasp, keeping door tightly closed and yet easily operated by carrier or patron. Has letter-slot in door. This box cannot be erected or used on rural routes. For use in cities and towns having suburban sidewalk delivery. Size 18½ inches long, 7½ inches high and 6¼ inches wide. (Not illustrated.) 85 cts., postage 15 cts. extra.

EGG SCALES, EGG CANDLERS, EGG CLEANERS

Clean, Graded Eggs Command Top Prices

Reliable Standard Egg Candler



Especially adapted for produce houses where a stationary Candler is most desirable. It is equipped with a wall bracket and so arranged that it swings on a pivot either right or left. The Candler proper is also adjustable and can be set at any degree most convenient to the operator. The powerful light bulb shows all defects in the egg instantly.

No. 600. Complete, including

Cord, Socket, and Bulb. \$1.80 postpaid.

Oakes Egg-Scale

A real Egg-Scale—accurate, dependable, and fast. Angle dial is easy to read. Individual egg-weight and weight per dozen are indicated on the double dial. Dial is black with figures in white.

Egg-cup, lever parts, and counterweight are chromium plated. Bearing-pins are brass.

No. 20S. \$1.50, postpaid.

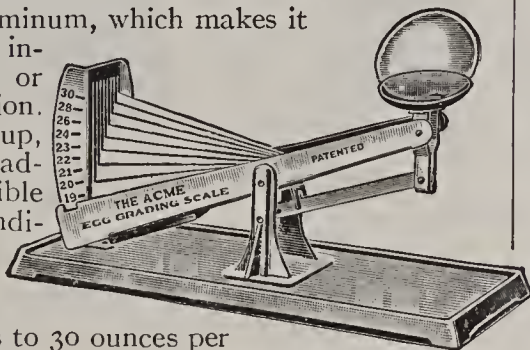


The Acme Egg-Grading Scale

Graded Eggs Mean a Higher Market Value

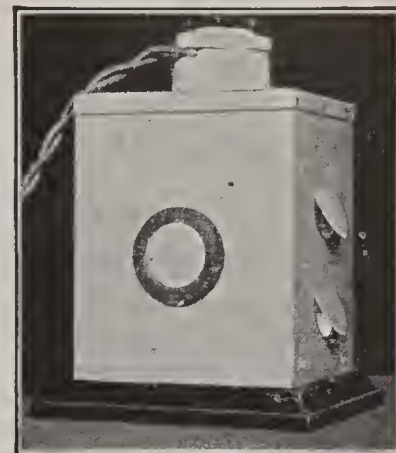
It is made entirely of aluminum, which makes it rustproof and practically indestructible. No springs or weights used in its construction. By placing an egg in the cup, the beam will automatically adjust itself. The lowest visible number on the blades will indicate the weight in ounces of one dozen like eggs.

Accurately grades all eggs ranging from 19 ounces to 30 ounces per dozen. Price \$2.35, postpaid.

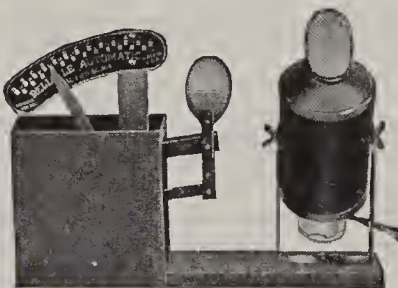


Reliable Reflecto Egg Candler

This Candler is quick in action and shows every defect in the egg instantly. It is equipped with a reflector that adds to the illumination of the entire egg, making it quick and thorough in candling. Can be attached to any light-socket. Complete, including cord and socket for 110 voltage. No. 700. \$1.30, postpaid.



Reliable "Candel-Weh" Combination



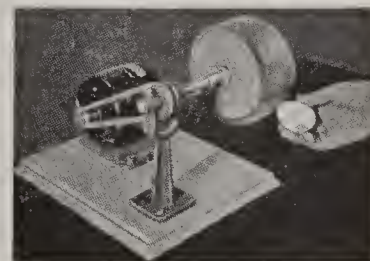
A combination Egg-Scale and Egg-Candler. This combination makes it convenient for the operator to grade and candle eggs without extra handling.

The scale is automatic in operation, and indicator arm points to exact weight of eggs per dozen. Graduated from 16 to 40 ounces to the dozen eggs.

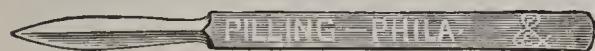
Candling can be done at any angle that is most convenient to the operator. Equipped with a 60-watt bulb for 110 voltage, complete with cord, sockets, and bulb. No. 550. \$3, postpaid.

Perfect Dry Egg Cleaner

Clean eggs means premium prices and extra profits. The Perfect Dry Egg Cleaner is the fastest Cleaner ever offered at a low price. It is unusually well built and will last for years. Furnished complete with 110-volt A.C. motor and egg-buffer. Price \$8.75, postpaid.

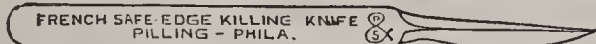


French Poultry-Killing Knife



Price 60 cts., postpaid

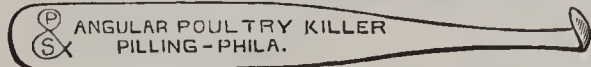
Safe-Edge Killing Knife



Exactly same as French Killer except cut on one side only. Price 60 cts., postpaid.

Pilling Angular Poultry-Killer

Price 60 cts., postpaid



Philadelphia Gape-Worm Extractor

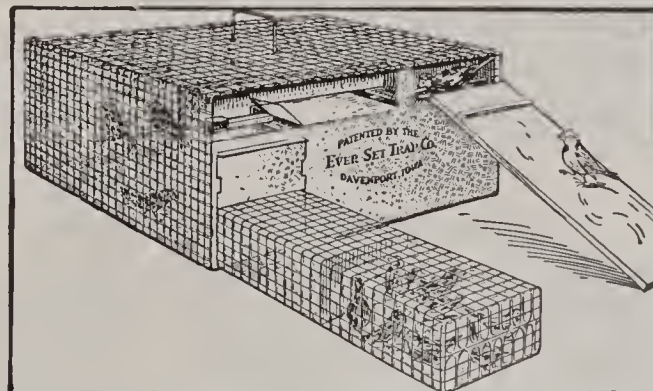


Price 30 cts., postpaid

Keep Your Poultry House Sanitary

Every poultryman should have an efficient Sprayer for applying disinfectants and whitewash. We offer an extensive selection of Sprayers on pages 84 and 85.

Ever-Set Sparrow Trap



Made of 1/2-inch galvanized hardware cloth. They have been fully tried out and have caught as high as 65 sparrows in one day in summer, and 40 in one day in winter in a single trap.

Size of trap 18 x 18 x 12 inches, with 3 x 5 x 18-inch receiving-cage (for drowning), with complete instructions.

To the Farmer and Poultryman. Fifty sparrows eat daily the equivalent of a quart of wheat. Very likely you have many more than 50 sparrows fattening on the high-priced feed that you intended for your poultry. Without stopping to figure, it is clear that an Ever-Set Trap pays for itself in a very short time. Price \$3.25, postpaid.



Hi There! Raise Every Chick with **Conkeys Y-O FEEDS**

Conkeys Y-O Starting Feed

For low mortality, rapid growth, and no leg-weakness (rickets), feed Conkeys Y-O Starting Feed. It is high in digestible nutrients and low in fiber. Avoid untested, unbalanced, so-called "cheap" feeds—they're dangerous. Use Conkeys—"It fills the bill."

Approximate Analysis: Protein 16%; Fat 4.5%; Fiber 5%; N. F. E. 55%; Carbo. 60%.

Ingredients: Dried Buttermilk, Cornmeal, Corn Feed Meal, Pulverized Oats, Wheat Middlings, Dried Skimmed Milk, Soybean Oil-meal, 1% Steamed Bonemeal, Blood-flour, Meat- and Bone-scrap, Crude Milk Albumen, 3/4% Limestone (97% pure Calcium Carbonate), 1/2% Salt, Y-O (Cod-liver Oil, Yeast, Soybean Oil-meal, Wheat Middlings, 1/4% Red Oxide of Iron).



Conkeys Y-O All-Mash Chick Ration

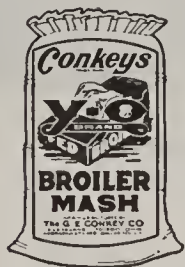


If you are raising your chicks the all-mash way, you will like Conkeys Y-O All-Mash Chick Ration. It is a completely balanced feed—all you have to do is to put it in the hoppers and let the chicks eat all they want. After about five or six weeks change to Conkeys Y-O Growing Mash.

Approximate Analysis: Protein 16%; Fat 4.5%; Fiber 6%; N. F. E. 54%; Carbo. 60%.

Ingredients: Dried Buttermilk, Corn Feed Meal, Wheat Middlings, Pulverized Oats, Wheat Bran, Meat- and Bone-scrap, Dried Skimmed Milk, 1% Steamed Bonemeal, Alfalfa Leaf-meal, Soybean Oil-meal, 3/4% Limestone (97% pure Calcium Carbonate), 1/2% Salt, Y-O (Cod-liver Oil, Yeast, Soybean Oil-meal, Wheat Middlings, 1/4% Red Oxide of Iron).

Conkeys Y-O Broiler Mash



Chicks raised for broiler purposes will do best when fed Conkeys Y-O Broiler Mash continuously, right from the start until they are marketed. It meets all requirements whether chicks are in storage brooders, batteries, in yards, or on range. Especially built for chicks being raised for future layers. For the latter, use Conkeys Y-O Starting Feed and Chick Grains or Conkeys Y-O All-Mash Chick Ration.

Approximate Analysis: Protein 19%; Fat 4%; Fiber 7%; N. F. E. 45%; Carbo. 52%.

Conkeys Y-O Growing Mash



If the growing pullets at any time lack vitamins A, B, D, and G, the result will be slow-developing, undersized birds. For this reason, Y-O is mixed in Conkeys Growing Mash. Y-O contains cod-liver oil combined with brewers yeast. It insures, in a potent and lasting form, the A, B, D, and G vitamins so necessary for the growing stock. This mash supplies all necessary materials for strong frames and solid flesh. Don't neglect your growing stock.

Approximate Analysis: Protein 18%; Fat 5%; Fiber 7%; N. F. E. 50%; Carbo. 57%.

Conkeys Y-O Egg Mash

A High-grade Egg Mash at a Surprisingly Low Price

This feed is composed of buttermilk, meat, bone, and wholesome grains in precisely the right proportion to keep your flock in prime condition and make them lay. Remember, a properly balanced feed is the secret of heavy egg-production. If your hens haven't exactly the ingredients required, they simply won't lay. You can't beat this law of nature. Conkeys Y-O Egg Mash is the result of years of study and tests. Feed it for economical egg-production.

Approximate Analysis: Protein 20%; Fat 5%; Fiber 7%; N. F. E. 46%; Carbo. 53%.



Conkeys Y-O Turkey Starting and Growing Mash



Turkey poults need a high-protein feed. For this reason, feed the poults Conkeys Y-O Turkey Starting and Growing Mash the first 8 to 9 weeks. From this time on grains should be given, gradually, until the poults are allowed all the grains they desire. Conkeys Y-O Turkey Starting and Growing Mash contains every food ingredient needed to make poults live, grow fast, and feather rapidly, and in addition it is vitalized with Conkeys Y-O.

Approximate Analysis: Protein 23%; Fat 5%; Fiber 7%; N. F. E. 45%; Carbo. 52%.

Conkeys Chick Grains

Just the thing to feed in connection with Conkeys Y-O Starting Feed after the chicks are two to three weeks old.

Conkeys Growing Grains

Cracked grains, larger in size than Chick Grains, and balanced especially for growing birds.

Save the Milk with Conkeys Y-O Kafmeal

Using Conkeys Kafmeal saves feeding whole milk, which always brings more on the market than it is worth as a calf feed. The milk can thus be saved and sold very profitably since Conkeys Kafmeal costs only a few cents a pound and 1 pound—mixed with 5 pounds of water—will take the place of 5 pounds of milk.



Conkeys Poultry Book FREE

If you call at our store, or mailed for 4 cents in stamps.

"Chamberlin's Perfect" Chick Starter and Developing Feed

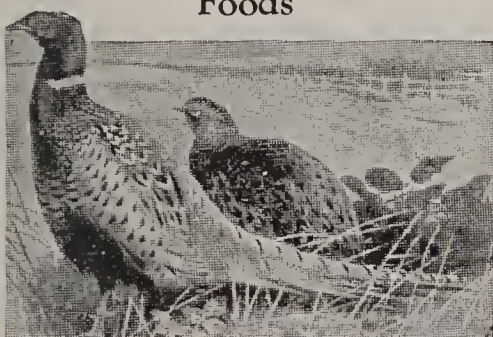
Nature's food for Baby Chicks, Turkey Poults, Bantams, Pheasants, and Ducklings



This original and scientifically correct starting-food is the only dry, granular, baby chick food with animal proteins, buttermilk, and cod-liver oil—all complete in one sack.

It is a wheat and oatmeal basis food, having ground meat, bone, charcoal, and all other essential ingredients. No corn—made right—no bowel trouble.

Spratt's Pheasant and Quail Foods



Prepared strictly according to modern scientific methods and is the result of careful and exhaustive experiments.

It has been demonstrated that to rear birds successfully they must have, while very young, a cooked food. Spratt's Pheasant Meal is composed of cereals, meat, vegetable, bone, and shell in judicious combination. No. 3 Coarse (for adult birds); No. 5 Medium (after three weeks old); No. 12 Fine (before three weeks old).

Ask for free copy of Spratt's Pheasant and Quail Bulletin

Belle Brand Oyster Shells

Crushed Oyster Shells should be kept where the fowls can have easy access to them all the year round. They supply carbonate of lime in natural form, act as a grit, and produce a firm, hard shell. Belle Brand shells are dry, and, having been carefully screened, are free from dust and dirt.

Darling's Steamed Bone-Meal

Rich in available phosphates, and suited to the mineral requirements of all live-stock and poultry. It is finely ground for convenience in mash mixtures and is especially valuable during growing and moulting periods for poultry. As a part of dairy cattle and hog rations, it provides minerals in an organic form that are readily absorbed by the body system.

"Nestco" Buttermilk

A life-saver for chicks. Promotes rapid, healthy growth. Unequaled as an egg-producer for pullets and hens. Feed it regularly and watch your young stock grow and develop into active, healthy birds. It can be fed with safety in any quantity to all poultry, regardless of age. Nestco Buttermilk is well known for its quality and freshness.

Yankee Brand Dried Buttermilk

It contains everything found in whole milk, and whole milk is universally recognized as the best food for man or animal. It contains no fibre. Every ounce of it is utilized in maintaining and building animal tissues, as it contains the most valuable constituents of all foods. Contains 32 to 33 per cent milk protein and 5 per cent fat.

Yankee Brand Dry Skim-Milk

A sweet, cream-colored powder, rich in vitamins and almost totally soluble in water. It carries an average analysis of 32 per cent protein, and contains no fibre. One hundred pounds of Dry Skim-Milk represents the total milk solids found in 1,200 pounds of liquid skim-milk, and supplies the vitamins, protein, and mineral matter (especially calcium) which are essential in the diet of all young animals for rapid growth.

Kraco Dried Whey

"Kraco" is made from liquid whey and contains the valuable milk-minerals needed in a poultry-feed. It does not destroy the balance of your feed-ration.

For Baby Chicks. Feed $7\frac{1}{2}$ per cent "Kraco" and see how greedily they eat their mash.

For Growing Birds. Feed them 5 per cent "Kraco."

For Laying Hens. Three per cent "Kraco" Dried Whey keeps layers in the best of condition.

For Coccidiosis. When this disease starts, stop it quickly by using 25 per cent "Kraco" for a few days.

"Moreggs"

(50% Meat and Bone Scrap)

Obtained from freshly rendered meat trimmings. It is completely dried so that it may be stored indefinitely and extra finely ground and screened for mixing in mashes. It contains all the food value of the meat and supplies the necessary protein and bone phosphate for egg-making. Analysis: Protein (min.) 50 per cent; Fat (min.) 8 per cent; Fibre (max.) 3 per cent.

Struven's Fish Meal

Fish Meal is an excellent source of proteins and minerals for all types of farm feeds. It may be used in combination with the meat by-products and milk, or as the sole source of animal protein in any ration. Protein is guaranteed 55 per cent. Fibre is less than 1 per cent.

For sturdy, thrifty stock, we recommend using Struven's Fish Meal in every ration.

Pearl Grit

A clean, white limestone Grit which is of proper hardness to serve as a grinder and at the same time, because of its high calcium carbonate content, supplies the necessary minerals for growing chicks and laying hens. Furnished in two sizes—coarse for poultry and fine ground for chicks.

Mica Crystal Grit

Mica Crystal Grit contains the proper combination of Mica, Quartz, Aluminum and Iron essential to all kinds of poultry. The peculiar formation of this grit, containing a large per cent of small flakes of Mica, assures at all times a sharp grinding surface. Furnished in three sizes, "Poultry," "Pigeon," and "Chick," all at the same price.

Broschkowsky's Health Grit

For pigeons. Every ingredient entering into its composition is the best obtainable, clean and is prepared amid sanitary surroundings. It contains nothing injurious of any nature; keeps your birds' digestive organs in prime order; provides the proper shell material; assists the birds in the moult; raises more and stronger youngsters; and wards off many troublesome diseases.

Red Cross Health Grit

A formulated mixture containing a great variety of gritty particles and materials with tonic properties, including everything the bird needs in proper proportions. Contains in condensed form the best tissue-building ingredients for birds known to science. A reconstructive tonic mixture of only pure properties.

Poultry Charcoal

Keeps poultry strong, healthy, and in good laying condition. Aids digestion, corrects wrong feeding and prevents disease. Fowls young and old should have free access to it at all times. We carry two sizes in stock—Medium and Fine.

Cut Red Clover

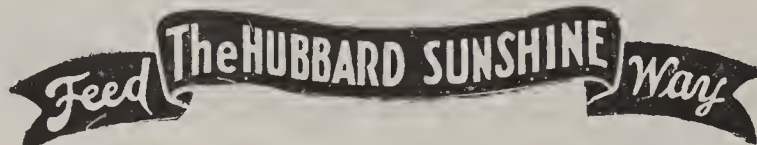
Cut Red Clover is one of the best green feeds for winter egg-production. The grade we offer is the purest and best to be had. Makes an excellent litter for chicks.

Miscellaneous Seeds and Grains

Cracked Corn	Whole Flaxseed
Whole Corn	Flaxseed Meal
Pigeon Corn	Barley
Pinhead Oatmeal	Wheat
Hulled Oats	Buckwheat
Sunflower Seed	Millet
Hemp Seed	Alfalfa Leaf Meal
Canary Seed	Oil-Meal
Rape Seed	Gluten Meal
Kaffir Corn	Cotton Seed Meal
Pigeon Peas	

Our stocks of the above are carefully selected and will be found equal to any on the market.

It Means BIGGER PROFITS to . . .



Each year, more and more feeders are placing their confidence in Hubbard's Sunshine Feeds and Mashs because it is their assurance of lower feeding costs and greater profits.

Hubbard's Sunshine Turkey Starter Mash

Minimum Crude Protein 26 per cent; Minimum Crude Fat $5\frac{1}{2}$ per cent; Carbohydrates (Maximum Crude Fibre $6\frac{1}{2}$ per cent, Minimum Nitrogen-free Extract 43 per cent).

Composed of 24 carefully selected ingredients correctly proportioned and blended to make a perfectly balanced ration. It insures maximum livability, faster growth, superior flesh and finer finish, and the most gain at the least cost.

Hubbard's Sunshine Chick Starter Mash

Minimum Crude Protein 18 per cent; Minimum Crude Fat 5 per cent; Carbohydrates (Maximum Crude Fibre 6 per cent, Minimum Nitrogen-free Extract 50 per cent).

Contains 26 selected ingredients, each one included for a specific purpose. Hubbard's Sunshine Chick Starter Mash assures maximum livability, faster growth, and economical production.

Hubbard's Sunshine Growing Mash. Minimum Crude Protein 18 per cent; Minimum Crude Fat 5 per cent; Carbohydrates (Maximum Crude Fibre 7 per cent, Minimum Nitrogen-free Extract 52 per cent). Scientifically compounded to take care of the chick's requirements from the sixth week to maturity.

Hubbard's Sunshine All-Mash Chick Starter

Minimum Crude Protein 16 per cent; Minimum Crude Fat 5 per cent; Carbohydrates (Maximum Crude Fat 6 per cent, Minimum Nitrogen-free Extract 50 per cent).

A complete ration for those who prefer to feed in this manner. The All-Mash is fed through to the laying stage, grains being added to the ration at six to eight weeks of age.

OK POULTRY LITTER

Saves Time, Work, and Money!

If you want an easy way to save yourself disagreeable work and at the same time give your birds a clean, sanitary home be sure to use O. K. Poultry Litter. Leading poultrymen everywhere prefer O. K. because of its many outstanding superiorities.

O. K. is clean, sanitary and easy to use. It keeps houses warm, dry, and free from dampness; it eliminates the need for monthly litter change. You'll like its uniform quality, its unusually high absorbency, its longer life.

Bales weigh about 175 pounds and cover about 80 square feet, 3 inches deep. Price, \$2.75 per bale; 5-bale lots, \$2.65 per bale. Delivery prepaid in Pittsburgh and suburban districts.

Stadzry Poultry Litter

Stadzry is the ideal all-round litter for poultry houses, baby chicks, brooder houses, and as a nesting material. It is economical because of its low price, large coverage per bale, and its lasting qualities. \$2.10 per bale; 5-bale lots, \$2 per bale, delivered in Pittsburgh and suburbs.

Nopco Cod-Liver Oil

A high-grade, natural Cod-Liver Oil above U. S. P. Standard in Vitamin A and D content. Contains less than 1.4 per cent free fatty acid. The popular favorite of thousands of farmers and poultrymen all over the United States. Nopco Cod-Liver Oil prevents rickets and aids in the production of more firm-shelled eggs of good market quality. It helps reduce mortality, increase hatchability, and increases income per pound of feed.

1-gal. can \$1.75, 15-gal. drum \$18, 30-gal. drum \$31.50, 54-gal. drum \$55.62.

Pratt's Vitamin-Tested Cod-Liver Oil

Pratt's Cod-Liver Oil is a pure, clear, light yellow, tested oil, with a vitamin A content guaranteed to conform to the standard of the United States Pharmacopoeia.

Added to the feed of baby chicks, aids growth, promotes health, prevents leg-weakness, and decreases mortality. The use of Cod-Liver Oil for layers results in better health, more and better-shelled eggs, quicker growth, and greater weight in market stock. Add it to the feed of all live stock.

Gal. can \$1.95, 5-gal. drum \$6.90.
30-gal. drum \$28.80, 50-gal. drum \$47, shipped from factory, freight prepaid.

Animal-Poultry Yeast Foam

Vigor Personified



Yeast Foam stimulates the reproductive organs and makes more eggs; it maintains health and vigor and aids digestion; produces bigger and stronger chicks. Increases milk-production and butter-fat in dairy cattle. Yeast Foam will do for all kinds of animals and birds what it does for poultry, cattle, and hogs. Mix it in the feed for dogs, rabbits, turkeys, pigeons, ducks, and foxes. It is easy to mix and does not spoil. 12-oz. pkg. 50 cts., 4-lb. box \$1.

Feed'Odine

An assimilable Iodine preparation. Used in drinking-water or feed rations, it helps to prevent and relieve coccidiosis, white diarrhea and worms in poultry. Aids health, growth, production and reproduction. An economical method for Iodine feeding. 8-oz. bottle \$1; pt. bottle \$1.50; qt. bottle \$2.50.

Morti-Cocci

Used and recommended by many leading poultrymen for the control of Coccidiosis. It should always be kept on hand for immediate use at the first symptoms of the disease. Add it to the drinking-water. A gallon will eradicate the disease from 500 chicks. Complete directions on package. Qt. \$1.25, 1/2 gal. \$2, gal. \$3.

Toxite Disease Control Spray

Invaluable for the control and prevention of disease and parasites. This powerful germicide kills all disease germs, including coccidiosis and tapeworm eggs. Equally effective for killing lice, red mites, fleas, ticks, bedbugs, ants, roaches, and other pests. Easy to use. Safe. Inexpensive. Approved by leading authorities and experimental stations.

Qt. 50 cts., gal. \$1.50, 5-gal. drum \$6.50.

Iodine Suspensoid Merck

The only known material which can be used in a practical and economical way to destroy coccidial oöcysts, the eggs of the parasite which causes coccidiosis. Coccidiosis is one of the most serious and widely spread diseases of poultry, and usually makes its appearance in chicks about three weeks of age, and from then on until the age of three months causes a very high death-rate.

1/2-lb. bottle \$2, 1-lb. bottle \$3.65.



Fox's Cannibalism and Pick-Out Control

A specially prepared red stain that is painted on the windows. It is transparent, moisture-proof, and can be applied on inside or outside of the windows and can be used on glass, Cel-O-Glass, or glass substitutes. Gives off a red glow under which chicks cannot distinguish blood. Stops instantly cannibalism in chicks and pick-outs in laying pullets. One pint covers 60 to 80 square feet of glass.

1/2-pt. can 90 cts., 1-pt. can \$1.50, 1-gal. can \$8.50.

Pik-Rem

Stops Cannibalism

Pik-Rem is not a medicine but a help in breaking the vicious habit of chicks picking each other and will quickly break up the condition known as cannibalism. It is blood-colored and blood-soluble, making it adhere to raw bloody surfaces. Very effective and harmless.

5-oz. jar 50 cts., 12-oz. jar \$1, 26-oz. jar \$2, postpaid.

Carbola

The Disinfecting White Paint

A white paint and powerful disinfectant combined in powder form. Stir the powder in a pail of water and it is ready for brush or sprayer. *Does not clog sprayer. Won't peel or flake.*

It gives walls and ceilings a smooth, white finish, increases the light, improves the appearance, and helps make buildings clean, sweet-smelling and free from mites and contagious disease germs. For dairies, poultry houses, cellars, dog-kennels, rabbit-hutches, garages, tree-trunks, etc. One pound covers about 100 square feet.

5 lbs. 60 cts., 10 lbs. \$1, 25 lbs. \$1.90, 50 lbs. \$3.50.

Bald Eagle Hydrated Lime

Makes an excellent whitewash. Acts as disinfectant, deodorant, and sanitary agent. Keeps premises sweet and clean. In the garden it corrects the sour condition which exists in many soils.

5-lb. bag 15 cts., 10-lb. bag 25 cts., 50-lb. bag 65 cts.

Rutland Water Glass

Prepared from a high grade of water glass manufactured especially for the purpose. One pint is sufficient for preserving about eight dozen eggs; one quart will preserve from fifteen to twenty dozen.

Pt. 15 cts., qt. 25 cts., gal. 85 cts.

BOOKS

Poultry

American Standard of Perfection. Published by the American Poultry Association and is the American authority on the recognized characters of all breeds of chickens, turkeys, ducks, and geese. Contains nearly 500 pages, 218 illustrations. Cloth binding, \$2.50.

Egg Record and Account Book. A simple, easy method of keeping correct accounts by the day, month, and year, of all expenses and income. Also a record of all eggs laid, set, or sold; of chicks hatched and sold, and a record of orders as filled. 40 cts.

Best Plans of Poultry-Houses. Many poultry-houses are unhealthful for the fowls; many are inconvenient to do the work in. Following the plans in this book is assurance that you will have a satisfactory poultry-house at the least expense. Illustrated. 50 cts.

Best Methods of Feeding. Neither profit nor satisfaction is possible where wrong methods of feeding prevail. Any except the best methods are expensive, wasteful, and do not produce the results that count. This book gives, in boiled-down, plain descriptions, the methods of feeding which have produced the best results. 50 cts.

Best Methods of Culling. In these days, the progressive poultry-man gets rid of his drones, or non-producers, and gives their room and their feed to fowls he knows, by testing according to the rules in this book, are hard-working, heavy layers. Illustrated. 50 cts.

Rabbits and Ducks

Care and Management of Rabbits. By Chesla C. Sherlock. A complete guide for all phases of care, breeding, and management of rabbits. Illustrated. Cloth binding, \$1.25.

Growing Ducks and Geese for Profit. By John H. Robinson. Complete textbook of domestic water-fowl, giving the latest and best methods for housing, feeding, incubation, brooding, and marketing. 448 pages; upwards of 200 illustrations. \$1.25.

American Rabbit Culture. By A. E. Facey, Jr. Tells everything you need to know about rabbits from beginning to end. Contains the standards of the various breeds and essential information for breeders. 200 pages. Paper binding, \$1.

Bees

Starting Right with Bees. Every beginner in bee-keeping should own this book. Fabrikoid, 50 cts.

ABC and XYZ of Bee Culture. The largest and most complete work on bees ever published. An encyclopedia on its subject. Latest edition. Fabrikoid cover, \$2.

Pigeons, Squabs and Turkeys

A to Z of Pigeons. By E. J. W. Dietz. New edition. The last word on pigeons. 156 pages; 51 illustrations. \$1.

National Standard Squab Book. By E. C. Rice. All about breeding pigeons and growing squabs for market. 416 pages; 211 illustrations. \$1.

Pigeon Disease and Feeding Management. By E. J. W. Dietz. Most complete information available on diseases. Chapter on general care. 78 pages; illustrated. 75 cts.

Turkey Production. By L. E. Cline, B.S., M.S. A complete text on breeding, feeding, handling, marketing, and disease control, prepared for the use of turkey producers and agricultural students. 300 pages; illustrated. Cloth, \$3.

Dogs and Pets

Feeding the Dog.

Laws about Dogs.

How to Ship Dogs.

Whelping of Puppies.

Each of above booklets consists of 16 pages. 25 cts. each, 50 cts. for 3; 8 or more, 14 cts. each, postpaid

Dog Shows and Rules.

House Breaking the Dog.

The Dog in the Show Ring.

Handling the Mating of Dogs.

Training the Dog. By Will Judy. For all breeds. Many illustrations. Includes full information on feeding, quarters, grooming, bathing, house-breaking, and care of the dog in health and sickness. The best book of its kind yet published. Written scientifically and yet plainly, so that the instructions can be easily applied by the owner of one or many dogs. \$1.50.

Dog Encyclopedia. By Will Judy. The only complete reference work on dogs, giving the photograph, history, description and official standards of all breeds, and giving also full information about all of the other dog subjects, such as breeding, grooming, kenneling, exhibiting, importing, and the like. It answers every question about dogs. Several hundred illustrations. \$5.

Our Dogs. By C. E. Harbison. It tells how a dog should be trained, fed, and kept in condition, also describes the causes and symptoms of diseases as well as their remedies and treatment. In fact, everything that a dog-owner should know for his dog's well-being is here presented in plain, easy-to-understand, non-technical language. Illustrated. Over 350 pages. Cloth, \$2.50.

Principles of Dog Breeding. It is so well and plainly written and so practical and helpful that it will be a guiding book on dog breeding for many years. The greatest book exclusively on this important subject. \$2.

Parrots and Other Talking Birds. By Charles N. Page. The most complete work on this subject. 35 cts.

Cat Culture. An instructive book treating on the care, breeding, and diseases of cats. 64 pages. 15 cts.

Canary Breeding and Training. By Charles N. Page. A treatise on the breeding, rearing, training, and care of canary birds. 101 pages; illustrated. 35 cts.

There are many other books on these subjects, and if we do not list the particular book you want, write us



Have a Conkey Corner in Your Poultry-House

Ready for Emergency



Conkeys

Raising poultry is pleasant and profitable when "good luck" is with you. "Good luck," however, is not merely a matter of chance, but of being prepared. For more than twenty-five years Conkey has been **The Poultry Doctor**. Take his advice. Install a Conkey Corner of remedies in your poultry-house as insurance against disease, trouble, loss, and disappointment.

Your money refunded if any Conkey remedy does not satisfy. **Conkeys Poultry Book** free if you call at our store, or mailed for 4 cents in stamps.

Conkeys Old Reliable Powder

This famous treatment has been on the market for thirty years, known to poultrymen everywhere as Conkeys Roup Remedy. Many would not try to keep poultry without Conkeys—the Old Reliable. Easily given in the drinking-water, letting the birds help themselves. Keep it on hand for use in emergency or put it in drinking founts on cold, rainy days, or when there is a sudden change in weather. In mild doses it acts as a tonic. 25 cts., 50 cts., \$1, and \$2.35; 5 lbs. \$5.50, postpaid.



Conkeys Poultry Pills

Formerly Called Conkeys Roup Pills

Administer these pills twice daily; in extreme cases three times a day. 25 cts., 50 cts., and \$1, postpaid.

Conkeys Balmo

A soothing, cooling application for relieving irritation around the swollen eyes and head and in the mouth when treating conditions caused by colds and similar troubles. Pkg. 50 cts., pt. \$1.20, qt. \$2, postpaid.

Conkeys Dia-Tabs

Formerly called Conkeys Diatex

The majority of diarrhea cases in chicks are due to digestive disorders which arise from feeding, chilling, overheating, crowding, insanitation, etc. The use of Conkeys Dia-Tabs—formerly called Conkeys White Diarrhea Remedy, then Conkeys Diatex—in the drinking-water will help prevent trouble. Pkgs. 25 cts., 50 cts., and \$1, all postpaid; breeder size (950 tablets) \$3.75, postpaid.



Conkeys Y-O

Vi-tal-izes Your Feed

Conkeys Y-O is a vitamin food containing cod-liver oil and brewers' yeast. It holds the potency of A, B, D, and G Vitamins so necessary for complete digestion. This product comes in the form of a powder which is free-running and mixes readily with any poultry mash. Only 2 to 3 per cent of this potent vitamin food is required in any mash. Conkeys Y-O in the feed brings more eggs, larger eggs, eggs of greater fertility and hatchability. With chicks, it helps to reduce mortality, prevents leg-weakness (rickets), and makes sturdy, fast-growing chicks with exceptionally well-developed bones. It is also fine for rabbits, foxes, dogs, and cats. Lb. 50 cts., 2 lbs. 90 cts., 5 lbs. \$1.60, drums (25 lbs.) \$5.45, 50 lbs. \$9.75, 100 lbs. \$17.50.

Conkeys Nox-i-cide

Conkeys Nox-i-cide has a large variety of uses about premises, and is approved by poultry experts everywhere. Use Conkeys Nox-i-cide for spraying during the "weekly clean-up" as a preventive of disease and a help in keeping down mites, ticks, blue bugs, etc. Conkeys Nox-i-cide is very effective for washing incubators, brooders, fountains, etc. Pt. 40 cts., qt. 60 cts., 2 qts. 90 cts., gal. \$1.50, 5 gals. \$6.75, 10 gals. \$12.75.

Conkeys Nikala Worm Tablets

Easy, Safe, Sure and Dependable

Conkeys Nikala Worm Tablets are effective in controlling round worms and tapeworms in chickens and turkeys.

These Tablets are covered with an air-tight coating which keeps them from dissolving until, when they reach the gizzard, the grit in the gizzard cuts this coating away and the nicotine and kamala is then liberated. Individual treatment of each bird is a simple matter, and it is the safest, surest way of destroying these profit-taking parasites. **Chick Size:** 40 tablets 50 cts., 90 tablets 90 cts., 500 tablets \$3.25, 1,000 tablets \$6, postpaid. **Adult Size:** 50 tablets 75 cts., 100 tablets \$1.25, 500 tablets \$5.25, 1,000 tablets \$9.50, postpaid.



Conkeys Poultry Tonic

Unequaled as a laying tonic, molting-powder, chick-conditioner, and poultry-regulator. Not a stimulant—no red pepper. Aids appetite, digestion, and helps your birds get more out of their feed. 1 1/2 lbs. 25 cts., 3 1/4 lbs. 50 cts., 7 lbs. \$1, 12 lbs. \$1.60, 25 lbs. \$3.

Conkeys Poultry Worm Powder

For large, round worms

Over 90 per cent of market poultry is infested with worms, of which there are many varieties—Round Worms, Gizzard and Cæcal Worms and Flukes or Leaf Worms. Worms cause great loss and flocks should be treated regularly. Pkgs. 25 cts. and 50 cts., postpaid. Breeder size (5 lbs.) \$2.75, postpaid.



Conkeys Scaly Leg Remedy. Destroys parasites causing this troublesome affection. 25 cts., postpaid.

Conkeys Lice Powder. Destroys body lice. They suck the energy from your flock. Dust Conkeys on your hens and in the dust-bath. 15 oz. 30 cts., 48 oz. 65 cts., and 12-lb. pail \$2.60, postpaid.

Conkeys Head Lice Ointment. Gets the big, murderous fellows that bore through the little chicks' skulls. 25 cts., postpaid.

Conkeys Household Spray. Repels insects for a long time, has a pleasing odor to people and does not stain or discolor objects on which it falls. 1/2 pt. 35 cts., pt. 60 cts., qt. \$1.

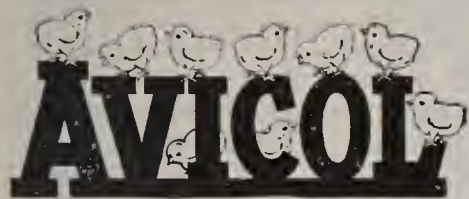
Conkeys Mite Liquid. Made especially to destroy the spider-like mites that laugh at ordinary lice preparations. Qt. 60 cts., 2 qts. 90 cts., gal. \$1.50, 5 gals. \$7. Express extra.

We Recommend Burrell-Dugger Poultry Remedies

Burrell-Dugger Poultry Remedies have been used by thousands of poultry owners, from coast to coast, for many years, and they have more than made good.

They are specialized remedies for poultry, produced in an up-to-date modern laboratory, just as scientifically and carefully as medicines for human beings.

Knowing the satisfaction which Burrell-Dugger remedies have given our customers, we do not hesitate to recommend them strongly. Every one is guaranteed to satisfy you, or your money will be promptly refunded in full.



FOR CHICK DIARRHEA



Use Avicol Regularly! It Will Pay You

Don't sit back, and say your loss of baby chicks can't be stopped. It can be stopped—easily, quickly, and at almost no expense by using Avicol in the drinking water occasionally. Avicol is a special bowel astringent, and helps the chick withstand infection.

Easy to give. Simply drop an Avicol Tablet in the drinking water. The chickens doctor themselves.

After you have once tried Avicol, you would no more think of trying to raise baby chicks without it than you would think of denying them food.

Avicol should be in the very first water the little chicks drink. And it costs so little that it will pay you to keep it in the drinking-water all the time, for all the flock, old and young.

Avicol is fully guaranteed. Your money will be promptly refunded without question or quibble if it doesn't satisfy you perfectly.

Price, 50 cts.; large size (holds three times 50-ct. size), \$1; economy size (6 times \$1 size) \$5, postpaid.



"I Need T. S. F."

T. S. F. (Talcimized Sodium Fluoride)

KILLS CHICKEN LICE

The U. S. Department of Agriculture and most leading State Agricultural Colleges endorse and recommend the Sodium Fluoride method of killing poultry lice.

Lice have probably cost the poultryman more money than any other poultry ailment. Wherever present, their effect is seen in stunting the growth, injuring the health, and reducing the egg-production of the whole flock.

After years of study and after numerous tests they report it the most effective, positive way to get rid of poultry lice. They say it kills all lice—both old and young—including the lice that hatch from eggs present on the fowl at the time of treatment.

For positive results be sure to get the genuine Talcimized Sodium Fluoride (call it T. S. F.) put up by the Burrell-Dugger Co. It is specially processed and prepared especially for poultry use, and is in a convenient, shaker-top package, bearing the U. S. Government's instructions for applying. One small package will treat about 40 chickens.

Price, small size 35 cts., large size (twice as much) 60 cts., special size (five times 60-ct. size) \$2.50 postpaid.



DON SUNG

Tonic and Conditioner for Laying Hens

Don Sung is a concentrated medicine—no bulk or filler—ready to add to the mash-feed. It has a direct tonic action and doesn't force or hurt the hen in any way. It does its wonderful work by putting the hen in good health, and helping maintain that health.

Costs Nothing to Try

Every poultry raiser is invited to try Don Sung—at our risk. Separate 15 hens and give them Don Sung for one month. The 50-ct. Trial Size handles this test. If Don Sung pays you, keep on with it. If you don't think it has paid you, tell us, and back comes your money. No argument to it. Don Sung is guaranteed—try it, at our risk.

Prices of Don Sung Tablets: Small guaranteed size, 50 cts., large size (3 times 50-ct. size) \$1, special size (6 times \$1 size) \$5 postpaid.



Group-Over

(Formerly called Roup-Over)

A New, Prompt,
Positive Guaranteed Treatment

FOR

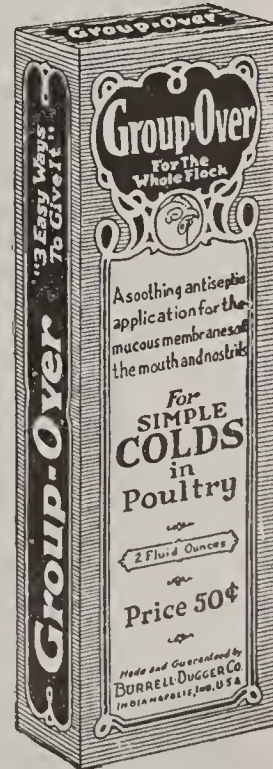
COLDS IN POULTRY

Keep Group-Over Handy—
Ready to Use

Keep a bottle of Group-Over on hand, and at the first symptom of a cold in your flock, start giving it to every affected bird. It clears the air-passages and brings relief with magic quickness. Group-Over is easily given. It comes in a liquid form and a few drops do the work.

This famous remedy is positively guaranteed to give complete, prompt, and positive results, or your money will be refunded in full. There is nothing on the market like Group-Over for roup, colds, and canker.

Prices, 50 cts., \$1 (three times 50-ct. size), \$3 (more than 5 times \$1 size), postpaid.



Pratts Poultry Remedies

Pratts Poultry Regulator. It builds up vitality, betters digestion, supplies rich food minerals and rare vegetable tonics, and sharpens the appetite. Helps Hens lay! Pkgs. 25 cts. and 50 cts., 12½-lb. pkg. \$1.50, 25-lb. pail \$2.75, 100-lb. drum \$9.50.

Pratts Disinfectant. A powerful coal-tar solution five times stronger than carbolic acid as a germ-killer. It makes a very effective live-stock dip and is excellent for use around poultry houses and stables. Pt. 35 cts., qt. 50 cts., 2 qts. 85 cts., gal. \$1.45, 5-gal. can \$6.50.

Pratts R-P Tablets. Especially valuable for roup. Can be used in the drinking-water or by individual treatments. Pkgs. 25 cts. and 50 cts., postpaid.

Pratts Chick Tablets. Widely used for white diarrhea. In tablet form for use in the drinking-water: Pkgs. 25 cts. and 50 cts., postpaid.

Pratts N-K Capsules. Nicotine is the best round- and pinworm killer. Kamala is the best for tapeworm. Instead of giving your birds two individual treatments, simply give one "Split-Action" N-K. Each N-K Capsule contains both drugs but releases each drug separately and hours apart.

Adult Size: 50 capsules 85 cts., 100 capsules \$1.50, 500 capsules \$5.50, 1,000 capsules \$10, postpaid.

Chick Size: 50 capsules 55 cts., 100 capsules \$1, 500 capsules \$3.75, 1,000 capsules \$6.50, postpaid.

Pratts Roost Paint. Controlled release of Nicotine at steady lice-killing rate makes Pratts Roost Paint deadly to lice at all temperatures. Just paint it on the roost. ½pt. 85 cts., pt. \$1.50, qt. \$2.25, gal. \$7.

Pratts Poultry-Worm Powder. A flock treatment for large, round-, and pinworms. Can be used as a several-day treatment or as a single-dose flock treatment. 60-ct. pkg. (100 hens), \$2 pkg. (500 hens), \$3.50 pkg. (1,000 hens).

Pratts Powdered Lice Killer. Kills lice on poultry. Pkgs. 25 cts. and 50 cts.

Lippincott's Poultry Remedy

For the control of roup, Lippincott's has never failed to give quick results when used in the proper way and the birds properly housed. 25 cts., 50 cts., and \$1 per bottle, postpaid.

Walko Tablets

For the drinking-water for baby chicks, turkeys, ducks, geese, or older fowls.

Especially valuable for diarrhea and loose-bowel trouble among incubator chicks. Powerfully destructive to germ-life, yet perfectly safe to give little chicks in their drinking-water as soon as they are out of the shell. 50 cts. and \$1, postpaid.

Toxite Veterinary Ointment

Invaluable for treating cuts and sores of all animals. It is both healing and antiseptic. Controls cannibalism and tail-picking in poultry. 4-oz. jar 50 cts., postpaid.

Dr. Salsbury's Poultry Prescriptions

As a member of Dr. Salsbury's Nation-Wide Poultry Health Service, we have, at all times, the latest bulletins, booklets, and literature of the scientific poultry world. Ask or write us for free educational literature.

Avi-Tone. For chickens and turkeys. Avi-Tone is a flock treatment for the removal of round worms, and also acts as a flock tonic and conditioner. In powder form. Avi-Tone mixes easily in wet or dry mash. 2-lb. pkg. 75 cts., 6-lb. pkg. \$2, 15-lb. pkg. \$4.75, 25-lb. drum \$7.50, 50-lb. drum \$14, 100-lb. drum \$27.

Cam-Pho-Sal. Pure medicine to be diluted with water to make an antiseptic spray for pneumonia, bronchitis, roup, colds, and all respiratory diseases. 2-oz. bottle 60 cts., 4-oz. bottle 75 cts., 8-oz. bottle \$1.10, 16-oz. bottle \$1.85, ½gal. \$6.75, gal. \$13.

Phen-O-Sal. For fowls of all ages. Widely used for diarrhea in baby chicks, coccidiosis, irritation from worms, and all other forms of bowel disturbances. Medicated tablet form to be put in drinking-water. 25 tablets 25 cts., 50 tablets 50 cts., 125 tablets \$1, 300 tablets \$2, 500 tablets \$3, 1,000 tablets \$5.50.

Rakos. Triple acid, antiseptic, and astringent treatment against acute and chronic coccidiosis in chickens, turkeys, and game fowls. In liquid form, it is mixed with feed or mash. Pt. \$1.25, qt. \$2, ½gal. \$3.50, gal. \$6.

Mixed Bacterin (Fowl). A preventive and curative treatment against bacterial forms of roup, colds, bronchitis, and pneumonia in chickens, turkeys, pigeons, and game-birds. Average dose 1 c.c. injected with syringe. 60 c.c. 85 cts., 250 c.c. \$3, 500 c.c. \$5.75, 1,000 c.c. \$10.

Williams Turkey Tonic

A proved practical preparation for treatment and prevention of blackhead in turkeys of all ages. Used in drinking-water or in severe cases may be administered with a syringe into the crop. Pt. \$1.75, qt. \$2.75, gal. \$10.



Oculum

A scientific remedy and preventive for cholera, roup, white diarrhea, and sore head. Give your hens Oculum and they will get heavier, their combs will get red and stay red, they will lay much better and more regularly. Bottle 50 cts., large bottle \$1, postpaid.

Lee's Gizzard Capsules

For round worms, tapeworms, pinworms in chickens, turkeys, etc. **Chick Size:** 50-capsule pkg. 40 cts., 100-capsule pkg. 75 cts. **Pullet Size:** 50-capsule pkg. 50 cts., 100-capsule pkg. \$1. **Adult Size:** 50-capsule pkg. 75 cts., 100-capsule pkg. \$1.25, 500-capsule pkg. \$5.50, postpaid.

Dr. LeGear's Poultry Prescriptions

Dr. LeGear's Poultry Prescription—Mineralized. This wonderful tonic contains mineral and vegetable ingredients, scientifically compounded to produce an efficient tonic, appetizer, conditioner, and regulator. 1¼-lb. pkg. 25 cts., 3-lb. pkg. 50 cts., 7-lb. pkg. \$1, 25-lb. pkg. \$3, postpaid.

Dr. LeGear's Poultry Worm Powder. Flock treatment for large round worms in growing chicks, laying hens, and turkeys. 1½-lb. pkg. 50 cts., 4-lb. pkg. \$1.

Dr. LeGear's Dip and Disinfectant. Antiseptic disinfectant, germicide, and deodorant. Use regularly to keep poultry houses, incubators, brooders, etc., sanitary and free from lice and mites. 8 ozs. 50 cts., qt. 65 cts., gal. \$1.75.

Dr. LeGear's Nicotine-Kamala Pills. **Adult Size:** For individual treatment. One pill does the work—no fasting. 50 tablets 75 cts., 100 tablets \$1.25, 500 tablets \$5.50. **Chick Size:** 45 pills 50 cts., 110 pills \$1, 500 pills \$3.50, postpaid.

Dr. LeGear's Chick Tablets. An intestinal astringent. When dissolved in the drinking-water it has a mild, antiseptic effect on the water which is very beneficial to all baby chicks as an intestinal astringent. 80 tablets 50 cts., postpaid.

Dr. LeGear's Lice Powder. Quick and effective in getting rid of lice and mites on poultry or in nests. Kills them as if by magic. 14-oz. can 25 cts., postpaid.

Dr. Hess Products

Dr. Hess Poultry Pan-A-Min. Its tonics promote appetite; keep hens healthy; start pullets and moulted hens to lay. Formerly known as Dr. Hess Panacea. 1½-lb. pkg. 25 cts., 3-lb. pkg. 45 cts., 7-lb. pkg. 85 cts., 15-lb. pkg. \$1.75, 25-lb. pkg. \$2.50, 100-lb. drum \$8.50.

Dr. Hess Poultry Worm Powder. A proved single-dose flock treatment for round worms. Given in mash, the expulsion of worms starts in a few hours and is usually completed in from 24 to 36 hours. No fasting or laxatives required. Does not check egg-production. Four ounces treats 100 birds. 2-oz. pkg. 50 cts., 4-oz. pkg. 90 cts., 10-oz. pkg. \$1.90, 1¼-lb. pkg. \$3, 2½-lb. pkg. \$5.40.

Dr. Hess Poultry Worm Tablets. The active ingredients of Dr. Hess Poultry Worm Powder in tablet form for individual treatment. 40-tablet pkg. 50 cts., 100-tablet pkg. \$1, 250-tablet pkg. \$2, 500-tablet pkg. \$3.50.

Dr. Hess Poultry Tablets. Valuable in treatment of roup; slightly astringent, non-irritating, and healing. Used as a local antiseptic and to medicate drinking-water. Aids in preventing disease. 25 cts., 50 cts., and \$1, postpaid.

Dr. Hess Instant Louse-Killer. Effective in ridding poultry of lice and mites. 1-lb. pkg. 25 cts., 2½-lb. pkg. 50 cts.

B-K (Bacili-Kil)

For prevention or treatment of roup, canker, chicken-pox, white diarrhea, bronchitis, and colds. Used in drinking-water, prevents spread of disease. Cleanses infected spots—kills the germs and cannot harm baby chicks.

Ideal disinfectant for brooders and incubators. Kills odors and leaves no smell of itself. B-K is concentrated—a little goes a long way.

Powder		Postpaid
Small (makes 1 gal.)	\$0 75	\$0 85
Large (makes 3 gals.)	1 50	1 60
Liquid		
4-oz. bottle	30	40
10-oz. bottle	50	60
1-qt. bottle	90	1 05
	Not Postpaid	
1-gal. bottle	\$2 00	
5-gal. jug	8 50	

HTH-15

Don't let colds and other respiratory troubles sap the strength of your breeding flocks. Dust with HTH-15 to prevent and combat these ailments. Use it regularly in the drinking-water to prevent spread of infection. Invaluable disinfectant for brooders and incubators. 1-lb. can 50 cts., 3-lb. can \$1, case of six 3-lb. cans \$4.80.

Sterilac

A virtually non-poisonous deodorizer and disinfectant.

Used in drinking-water, Sterilac will aid in the prevention of sour crop and bowel troubles. It is recommended for use in hatcheries, incubators, and for sanitation in general. Being in powder form, Sterilac does not freeze and fresh solutions can be prepared as needed. Cleanliness and sanitation are essential for a successful poultry business. 2-oz. bottle \$1, 8-oz. bottle \$2.50, 16-oz. bottle \$4.50, 5-lb. pkg. \$18.



Chic-Tone in the drinking-water increases the appetite and builds up vitality. It is both an intestinal antiseptic and general tonic. Protects against many intestinal disorders—helps to keep your birds healthy, aiding them to get maximum value from the feed consumed. Poultry raisers everywhere are finding Chic-Tone in the drinking-water is a safeguard and insurance against low vitality. Pt. 60 cts., qt. \$1, gal. \$3.50, 5 gals. \$13.75.

Chick-Tone Inhalant

When poultry raisers pour Chic-Tone in the drinking-water and spray Chic-Tone Inhalant in the air, their death-losses from colds and respiratory ills are kept way down, and that applies to birds of all ages from baby chicks to old hens. Powerful, germ-killing gases and healing oils in Chic-Tone Inhalant are inhaled by birds, opening up the nostrils, causing discharge of mucus, healing irritated membranes. Do not dilute. Spray right into faces of birds. Qt. \$1, gal. \$3.50, 5 gals. \$13.75.

Barnes Emulsion



A scientifically tested vitamin-containing product which can be fed with safety to domestic animals and poultry. If your chickens are backward in growth and development, have pale faces and shanks, and stand around droopy,

with eyes closed; if some of your birds "go light," then die; or if they are affected with brownish diarrhea, the cause is likely to be intestinal worm-infestation.

Obtain a can and prove to yourself its merit and effectiveness. Qt. \$1, gal. \$3, 5-gal. keg \$12.50.

Ask for 32-page booklet "Common Sense vs. Worms."

"Black Leaf" Worm Powder CONTROLS POULTRY ROUND WORM

An odorless, tasteless, dry compound containing nicotine that remains insoluble until it reaches the intestines where large round-worm infestation occurs. This product furnishes "one-shot" control of round worm without handling the birds and without the disturbance caused by individual handling.

"Black Leaf" Worm Powder is easily fed in mash. The dose for 100 birds is 4 ounces, mixed in a gallon of mash, fed the first thing in the morning. 4-oz. pkg. 75 cts., 1 1/2-lb. pkg. \$2.90, 3-lb. pkgs. \$5.60, ppd. "Black Leaf" Worm Pellets. Produced from "Black Leaf" Worm Powder. Highly efficient. 85 cts. per 100, \$3.50 per 500, \$6.50 per 1,000, postpaid.

Gold-Leaf Tobacco Powder

Manufactured especially to control round worms in poultry. So certain is its action that it may well be considered a specific for the control of this trouble. The treatment is exceedingly inexpensive.

Mix two pounds of Gold-Leaf Tobacco Powder with 100 pounds of dry mash. 2-lb. carton 25 cts., 10-lb. package 75 cts., carton (6 10-lb. packages) \$4.

Iodine Vermicide Merck

Kills worms in poultry the approved way. One gallon of diluted material is sufficient to treat about 125 adult birds. Iodine Vermicide will not throw birds off egg-production, but will, if properly used, increase it materially. 1/2-lb. bottle \$1.90, 1-lb. bottle \$3.40.

Dosing Appliance, chick and poultry size 35 cts.; adult turkey size \$1.

McKeon's "Liquid Sulpho" THE HEALTH INSURANCE FOR POULTRY AND RABBITS

Used daily in drinking-water eliminates and prevents large round worms and other intestinal diseases. Rids and keeps birds free of lice. 3-oz. bottle 50 cts., 8-oz. (medicates over 1,200 gals. of water) \$1, postpaid. Unconditionally guaranteed.

Carbolineum

Standard Insecticide and Wood Preserver
Since 1876

One thorough application of Avenarius Carbolineum, either by brush or sprayer, to the walls, dropping-boards, roosts, etc., of buildings, will kill all mites by direct contact and effectually stop their propagation. Only necessary to apply once a year.

Avenarius Carbolineum is composed of non-volatile anthracene oils and other ingredients, and represents the very cream of wood-preserving oils. It will not evaporate or leach from wood in a short time, but will remain there almost indefinitely.

Termites (white ants) will not attack "Avenarius Carbolineum" treated wood. Even after they have been found, future infestations may be prevented if "Avenarius Carbolineum" is applied.

1-gal. can \$1.60, 5-gal. can \$7, 10-gal. drum \$13.50.

35-gal. steel barrel \$39.20, 55-gal. steel barrel \$57.75, shipped from factory, freight prepaid.

Zenoleum

An efficient insecticide, disinfectant, deodorizer, germicide, and cleanser. It is essentially a solution of coal-tar creosote oil soap and gives a most perfect emulsion when mixed with water. Use it as a spray in poultry houses and kennels, dip for sheep and lice on horses and cattle. Makes an excellent wash for dogs. One quart makes about 25 gallons of solution. 8-oz. can 35 cts., 1-qt. can 75 cts., 1/2-gal. can \$1.25, 1-gal. can \$2, 5-gal. can \$8.

"Black-Leaf 40"

Paint it on the roosts

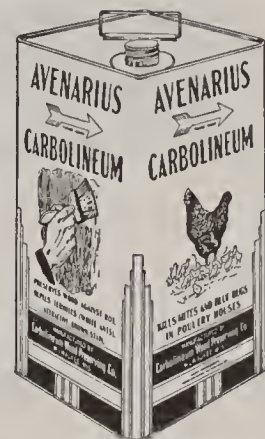
A sure method for controlling body-lice. Is also effective when applied as a spray against poultry mites. One ounce will paint about 12 or 15 running feet of roost. When used as a spray, dilute at the rate of about one tablespoonful to one gallon of water and add about 1/2 ounce of ordinary laundry soap. Dissolve the soap in hot water. 1-oz. bottle 35 cts., 5-oz. bottle \$1, 1-lb. bottle \$2.25, 2-lb. tin \$3.25.

Roto Pigeon Salt

A necessity to the health of pigeons. In brick form. Size of Bricks, 7 1/2 x 3 1/2 x 2 inches. Each, 25 cts., postpaid 35 cts.; doz. \$2.75, postpaid \$2.90.

Ex-Cel-So Rabbit Salt Spool

Keep your stock healthy and in good condition by keeping Salt Spools always before them. Prevents common disorders and disease. Two kinds: pure salt and salt with sulphur added. Either kind, 5 cts. each, 50 cts. per doz., postpaid 70 cts. per doz.; 100 for \$3.50.



Dog and Pet Foods and Supplies

This department offers a wide assortment of foods, remedies, and supplies for dogs, cats, birds, and other pets. They have all been tested and found reliable for the purposes intended.

In addition to the goods shown in this Catalogue, we have a

representative line of Collars, Harness, Leashes, Baskets, Brushes, Blankets, and Sweaters for dogs. Since this merchandise is too diversified to be included in the Catalogue, we invite you to call at the store and inspect it personally.

BANNOCK DOG FOODS

For ALL DOGS . . ALL BREEDS . . ALL AGES

BANNOCK BODY BUILDER

"Dog Food at Its Best"

Healthful, economical, and convenient to feed, Bannock Body Builder is a balanced ration, containing all of the food elements necessary for the proper nutrition of dogs. Proteins, vegetables, fats, minerals, vitamins, and Fleischmann's Irradiated Yeast—all especially selected and in correct proportion. Breeders, trainers, and veterinarians alike recommend Bannock Dog Foods.

BANNOCK DOG BISCUIT

"Good Food for Good Dogs"

Available in both whole and kibbled forms, Bannock Dog Biscuits may be fed dry or soaked. Kennel-owners and breeders use Bannock Dog Biscuits because they are higher in digestible proteins, contain the necessary vitamins, and are expertly blended with carefully selected carbohydrates.

Bannock Body Builder

5 lbs.....	\$0 45
10 lbs.....	85
25-lb. bag.....	1 90
50-lb. bag.....	3 50
100-lb. bag.....	6 50
500 lbs.....	28 75

Bannock Dog Biscuits

Whole or Kibbled

5 lbs.....	\$0 60
10 lbs.....	1 10
25 lbs.....	2 25
50-lb. bag.....	4 25
100 lbs.....	8 25
500 lbs.....	38 75

Spratt's Dog and Puppy Foods

For over eighty years, Spratt's "Meat Fibrine" Biscuit Foods have been termed "Foods of Quality." They lead in nourishing properties, suitability to the constitution of present-day dogs, and in economical value. Their reputation is world-wide.

SPRATT'S FIBO. An appetizing granulated food for shy and dainty feeders. Suitable for change of diet for any dog at any time. Feed dry or soaked with broth. Carton 40 cts., 5-lb. bag 90 cts., 25-lb. bag \$3.45, 100-lb. bag \$12.50.

SPRATT'S OVALS. Handy pocket biscuits suitable for all breeds. Carry a few when on a ramble with your dog. Carton 35 cts., 5-lb. bag 80 cts., 25-lb. bag \$3.10, 100-lb. bag \$11.25.

SPRATT'S SPIX. Meat fibrine biscuit, bone size. All dogs like this biscuit. Carton 35 cts., 5-lb. bag 80 cts., 25-lb. box \$3.20, 50-lb. box \$5.90.

SPRATT'S CHARCOAL OVALS. Aid in the elimination of fetid breath and stomach impurities. Carton 40 cts., 5-lb. bag 85 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

SPRATT'S COD-LIVER OIL OVALS. Aids in the conditioning of dogs; invaluable during the winter months. Carton 40 cts., 5-lb. bag 85 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

SPRATT'S CHALLENGE TERRIER MEAL. Granulated meat fibrine food. 5-lb. bag 65 cts., 25-lb. bag \$2.85, 50-lb. bag \$5, 100-lb. bag \$9.50.

SPRATT'S MEAT FIBRINE DOG CAKES. Standard dog cake for large dogs, used by all leading dog breeders. Carton 35 cts., 5-lb. bag 75 cts., 25-lb. box \$3.10, 100-lb. box \$11.15.

SPRATT'S PUPPY CAKES. A complete and perfect food for puppies from weaning-time onward, and for small breeds as the regular food. Carton 40 cts., 5-lb. bag 80 cts., 25-lb. bag \$3.10, 100-lb. bag \$11.25.

SPRATT'S COD-LIVER OIL CAKES. For the larger breeds of dogs. Carton 40 cts., 5-lb. bag 85 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

SPRATT'S PEPSINATED MEAL. For puppies or kittens with weak digestion; is extremely assimilative and will make most unpromising youngsters thrive. 12-oz. can 40 cts.



SPRATT'S PUPPILAC. A perfect substitute for the milk of the bitch, for rearing orphan puppies, at weaning-time and for ailing dogs in sickness or convalescence. This is also valuable as a food for cats and kittens. 10-oz. can 60 cts.

SPRATT'S BONE MEAL FOR PUPPIES. A great preventive of early weakness in puppies, containing all the elements needed to insure vigorous frame. Prepared for easy mixing with the staple food. 3-lb. tin 60 cts.

SPRATT'S CALCIUM PHOSPHATE. For Rickets and Osteoporosis. An admirable adjunct in the feeding of puppies of the large breeds. It may also be given to bitches before whelping. Easily assimilated and has no irritating effect on the stomach. 1-lb. can 75 cts.



We Recommend PERFECTION DOG FOODS

"Time-Tested for more than 25 years"



MEAT-CEREAL (For all dogs, all ages. Ready to feed.)

2 1/2-lb. package.....	\$0 25
5-lb. bag.....	40
10-lb. bag.....	75
25-lb. bag.....	1 75
50-lb. bag.....	3 25
100-lb. bag.....	6 00
500 lbs.....	27 50

CUBES (Meat-Cereal formula).

5-lb. bag.....	\$0 45
10-lb. bag.....	85
25-lb. bag.....	1 95
50-lb. bag.....	3 40

Protein to give strength—carbohydrates for energy and heat—minerals for digestion and bone-building. All Perfection Dog Foods are scientifically cooked and blended, each one a perfectly balanced ration.



FREE

•
DOG
BOOKS

•
PEDIGREE
BLANKS



KIBBLED BISCUIT.

5-lb. bag.....	\$0 60
10-lb. bag.....	1 00
25-lb. bag.....	2 45
50-lb. bag.....	4 50
100-lb. bag.....	8 50

WHOLE BISCUIT.

5-lb. bag.....	\$0 60
10-lb. bag.....	1 00
25-lb. bag.....	2 40
50-lb. bag.....	4 40
100-lb. bag.....	8 25

CANNED MEAT FOOD. 1-lb. can 10 cts.,
3 for 25 cts., case (48 1-lb. cans) \$3.90.



Miller's Battle Creek Health Foods for Dogs

These excellent foods for dogs are made from meat, cereals, Fleischmann's Irradiated Dry Yeast, Squibbs Cod-Liver Oil, bone-meal, milk, egg, and other top-quality ingredients. They contain abundant vitamins and all necessary food elements, and can be fed alone or mixed with other things for variety. Satisfaction guaranteed or money refunded.

Miller's basic diets are concentrated and go three times as far as fresh or canned meat foods. They contain no moisture or filler.

KIBBLES

5 lbs.....	\$0 60
25-lb. sack.....	2 45
50-lb. sack.....	4 50
100-lb. sack.....	8 50

RATION

5 lbs.....	\$0 40
25-lb. sack.....	1 75
50-lb. sack.....	3 25
100-lb. sack.....	6 00

PUPPY MEAL

28-oz. carton.....	\$0 30
25-lb. sack.....	2 45
50-lb. sack.....	4 50
100-lb. sack.....	8 50

BISCUIT

2-lb. carton.....	\$0 35
25-lb. sack.....	2 40
50-lb. sack.....	4 40
100-lb. sack.....	8 25



Bresko Dog Foods with 5 Vitamins, plus Ingredient "K"

Ingredient K has revolutionized modern dog-feeding. It is vacuum-processed Liver Meal, and searching laboratory and kennel tests have revealed its amazing power to build red corpuscles, to prevent anemia, and to make puppies grow into strong, sturdy dogs. Ingredient K is blended with Bresko plus the five health-giving vitamins, A, B, D, E, and G.

BRESKO MEATBONE CRISP. (Kibbled.)

5-lb. bag 50 cts., 25-lb. bag \$2.25,
100-lb. bag \$6.75.

BRESKO RATION. 5-lb. bag 40 cts.,
25-lb. bag \$1.65, 100-lb. bag \$5.50.

Best-of-All Dog Ration

A balanced food for dogs and puppies, made of the very best ingredients of meat, grain, cereals, bone, cod-liver oil, and powdered molasses. 5-lb. bag 40 cts., 25-lb. bag \$1.65, 50-lb. bag \$2.90, 100-lb. bag \$5.25.

Ti-O-Ga Dog Food Meal

This is the original Leon F. Whitney formula perfected to the highest standard of modern scientific knowledge of canine nutrition. It is an economical food, containing 1,500 calories to the pound, which is twice the energy value of lean beef and provides nutrients lacking in beef. Ti-O-Ga Dog Food is an ideal maintenance diet which will keep dogs of all breeds in splendid health, strong bone, and fine coat. 5-lb. bag 55 cts., 10-lb. bag 90 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7, 500 lbs. \$32.50.

Ti-O-Ga Puppy Food

Grows puppies faster than any privately prepared diet. Its high protein content, its abundance of calcium, phosphorus, and vital growth-promoting vitamins insures the best possible growth of puppies. 5-lb. bag 65 cts., 10-lb. bag \$1.20, 25-lb. bag \$2.25, 50-lb. bag \$4.25, 100-lb. bag \$8.

Pratt's Dog Food

A complete, balanced food in cubed form. No other food or supplement need be fed to completely nourish the dog. It contains all the known necessary vitamins, the bone- and nerve-forming minerals, and nature's own food regulators and conditioners which make for perfect health and growth. It is made from the sweetest and purest of laboratory controlled ingredients. It is economical, easy to feed, and suited to all dogs. Cannot freeze, spoil or mold. 5-lb. bag 35 cts., 10-lb. bag 75 cts., 25-lb. bag \$1.85, 50-lb. bag \$3.25, 100-bag \$6.25.

Hubbard's Sunshine Dog Food

Feed your dog Hubbard's Sunshine Dog Food. He will like it. A dry food containing all the vitamins and freshness of fresh foods. 5 lbs. 55 cts., 10 lbs. 90 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7, 500 lbs. \$32.50.



Scott's Special Dog Food

A clean, pure, and wholesome food for dogs and puppies of all breeds. Prepared from lean beef with cereals and vegetables added in proper proportion to provide vitamins, proteins, and carbohydrates needed in the daily ration. It is perfectly cooked, ready to feed without any preparation whatever, and is suitable for all-year-round feeding. U. S. inspected and passed by

Department of Agriculture. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

Pard Dog Food

A ready-to-serve ration made especially for dogs and cats of all breeds and ages. Composed of meats, meat by-products, wheat, barley, dry skim-milk, tomatoes, edible bone, sodium chloride and cod-liver oil. U. S. inspected and passed by Department of Agriculture. A product of Swift & Co. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

Red Heart Dog Food

A meat-food product with cereals and vegetables for dogs and cats. Contains all the elements which are essential to the growth and health of animals. Furnished in three diets: Diet A with beef added, Diet B with fish added, Diet C with cheese added. Vary the menu by alternating the diets. 1-lb. can 10 cts., 3 for 29 cts., case (48 cans) \$4.25.

Doggie Dinner

Keep your dog in perfect condition always with Doggie Dinner, the perfectly balanced beef meat ration. It is composed of beef products, rice, barley, oats, carrots, cod-liver oil, charcoal, and bone-meal, all of which are essential to the growth and health of animals. Has the endorsement of leading veterinarians and animal hospitals. 1-lb. can 10 cts., 3 for 25 cts., case (24 cans) \$1.95.



Evr Redy Dog Food

Contains lean red meat, whole wheat, other cereals, vegetables, etc.—in all, ten different ingredients, each contributing its part to make a wholesome, pure, palatable food abundantly supplied with all the vitamins and elements which are as essential to a dog's welfare as to our own. Evr Redy Dog Food is Government inspected. No other food is needed because it is a balanced ration. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.25.

Rival Brand Dog Food

A meat-food product with cooked barley, vegetable flour, wheat products, and rolled oats. Cooked and ready for use. Suitable for year-round feeding and for all breeds of dogs. U. S. inspected and passed by Department of Agriculture. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

CHAPPEL BROS., Inc.

KEN-L-RATION PRODUCTS

The meat or meat by-product ingredients of Ken-L-Ration have been examined and passed under Federal supervision. It has been prepared in an establishment operating under Federal meat inspection. Ken-L-Ration is safe to put in your ice-box.



KEN-L-RATION

The Dog Food Supreme

Ken-L-Ration is made two ways, with horse meat or beef meat, and is as clean, pure and wholesome as the food used on your table. It is composed of fresh, lean meat, the best grade of whole cereal, and cod-liver oil tested for its vitamin potency. Ken-L-Ration is U. S. inspected and passed by the Department of Agriculture. This is your absolute guarantee of quality. Ken-L-Ration is the ideal food for growth, body maintenance and health of dogs of all kinds and ages. 1-lb. can 10 cts., 3 for 25 cts., case (48 1-lb. cans) \$3.90.

Maro-Meat

Maro-Meat is a basic ration of fresh meat, blood, liver, bone and marrow too highly concentrated for feeding alone. Designed for large consumers as a basic meat ration to be mixed with Ken-L-Biskit and Ken-L-Worth. An economical ration can be made by mixing 5 pounds of Ken-L-Biskit after absorbing its equal weight in water, and a 1-pound can of Maro-Meat. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$5.15; 2½-lb. can 35 cts., case (18 2½-lb. cans) \$5.

Hemo-Ration

A scientifically prepared food of rich and easily digested blood solids, organic iron, natural calcium phosphate, cod-liver oil, meat, and whole cereals. Excellent for anemics and convalescents. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$4.75.

For Economy Feed Chappel's Fresh Meat Biskits

KEN-L-BISKIT

INGREDIENTS

Fresh Meat, Wheat Germ, Yeast,
Egg Yolk, Wheat Flour,
Fresh Whole Milk and Bone

Chappel's Ken-L-Biskit is scientifically prepared from fresh raw meat and carefully selected ingredients. Its nutritional value has been proven in laboratory controlled feeding tests by recognized scientists.

Whole biscuit, 25-oz. pkg. 25 cts., 3 for 65 cts.

Kibbled form, 25-lb. bag \$2.25, 50-lb. bag \$4.25, 100-lb. bag \$8.25, 200 lbs. \$16.



KEN-L-WORTH

A biscuit of high quality, containing a large percentage of fresh, lean, raw meat and the correct amount of bone. 25-lb. bag \$2.10, 50-lb. bag \$3.90, 100-lb. bag \$7.50, 200 lbs. \$14.50.

Kit-E-Ration

A cat food made especially for cats, containing fresh cooked liver, lean meat, fresh whole milk, fish, Earlyne, selected cereals, and cod-liver oil. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$4.75.

Gee I wish my boss would give me some of that



A food supplement rich in Vitamins B, G, and D. Helps to keep your dog in wonderful condition, to eliminate skin trouble and intestinal disorders, and to give him a finer glossier coat. Stops itching. Ten times as rich in Vitamin D as U. S. P. Cod-Liver Oil, and consequently an excellent bone-builder for puppies. Guaranteed to prevent rickets or money will be refunded.

3½-oz. can 25 cts., 8-oz. can 50 cts., 1-lb. can 85 cts., 5-lb. can \$3.50, postpaid.

Just add a teaspoonful to his daily food.

FLEISCHMANN'S

Irradiated Dry

YEAST FOR DOGS

MILK-BONE . . . for Vitamins and Good Health!

Milk-Bone is no experiment or fad. It has been helping dog-owners solve their feeding problems for more than thirty years. In addition to clean beef meat, milk, cereals, and food minerals in proper proportions, Milk-



Bone provides in beneficial quantities the vitamins which are necessary for proper growth. These are Vitamins A, B, D, E, and F—each with its own contribution toward building resistance to disease and maintaining important bodily functions.

Puppy Biscuit, 26-oz. carton. 35 cts. each, 3 for \$1.

Dog Biscuit, 29-oz. carton. 35 cts. each, 3 for \$1.

Junior Size Milk-Bone for Dogs and Puppies, 22-oz. carton. 30 cts. each, 3 for 85 cts.

"Old Trusty" All Terrier Food

A granulated food of even balance, carefully mixed, not medicated or sweetened. An ideal food for all breeds, particularly terriers and active dogs. May be fed dry or moistened with milk or soup. Vegetables may also be added.

Large carton	\$0 35
5-lb. bag	65
25-lb. bag	2 50
50-lb. bag	4 35
100-lb. bag	8 25



Our Pet Department offers a very extensive selection of Dog and Cat Foods, Remedies and Supplies, and Bird and Fish Foods. Whatever you may need, we have it.

IMPERIAL

DOG FOODS

Imperial Dog Foods are made entirely from clean, fresh food-stuffs, processed with the same care and cleanliness as are human foods and supply the essential food-elements that all dogs require. They eliminate the guess-work from feeding and keep your dog healthy and full of pep. All dogs relish Imperial Foods because of their crisp tastiness and enticing flavor, and you will find them both convenient and economical to feed.

Imperial Milk and Meat Cereal. A complete diet in all respects. Contains all of the food factors recognized by experts and carefully processed and proportioned to meet the nutritional requirements of the average dog or pup. Ready to feed simply by adding water, milk, or gravy in equal parts. A quality product and the result of long and actual experience in the dog world. 5-lb. bag 50 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7.

Imperial Dog-Ration. (Kibbled.) Primarily a high-quality health-promoting, balanced ration Dog Food designed especially for kennel use to form a major part of the dog's diet. 5-lb. bag 65 cts., 25-lb. bag \$2.25, 50-lb. bag \$4.

Imperial Kibbled Meat-Ration. A baked food that eliminates your worries about correct diet—a food composed of 50 per cent pure, cooked fresh meat with cereals, vegetables, grains, and minerals. Absolutely nothing to be added but a little water to mix into a tasty, nourishing mash that your dogs and puppies will relish and thrive on. 25-lb. bag \$2.30, 50-lb. bag \$4.10.

Imperial Dominoes. The ideal Biscuits for small breeds. Small, tasty, and highly nutritious, they are just the right size for the puppies and do not have to be broken or soaked up. 25-lb. bag \$2.50, 50-lb. bag \$4.50.

Gaines Meat and Milk Meal

The Choice of Experienced Feeders

A complete, balanced dog food for dogs of all ages, and particularly valuable for young puppies from weaning on. It is composed of beef, vegetables, whole wheat, rice, corn, minerals, cod-liver oil, and other ingredients, and is thoroughly cooked and ready to serve. Gives dogs vigorous health, glossy coats, better digestion, and clean intestinal tracts. Fed and highly recommended by leading authorities, breeders, and hunt clubs everywhere.

5 lbs.	\$0 45	50 lbs.	\$3 50
10 lbs.	85	100 lbs.	6 50
25 lbs.	1 90	500 lbs.	28 75

Gaines Krunchon

Made of exactly the same ingredients as Gaines Meat and Milk Meal, but hardened into convenient-sized cubes that all dogs eagerly "crunch on," massaging their gums and increasing the flow of saliva.

5 lbs.	\$0 55	50 lbs.	\$3 75
10 lbs.	1 00	100 lbs.	7 00
25 lbs.	2 15		

Myles Standish Portable Dog Kennel

Made of genuine Masonite Presdwood—weatherproofed to withstand rain, snow, and sunshine. Light, durable, easy to clean inside and out. Use it in the home or yard; excellent for shipping dogs or exhibiting at dog shows and field-trials. Can be painted any color; the surface makes a good base.

Dimensions			
Width	Height	Length	Each
12 in.	14½ in.	18 in.	\$3 95
16 in.	19½ in.	24 in.	4 95
21 in.	23½ in.	28 in.	6 95
24 in.	30 in.	32 in.	16 00

Larger sizes available on order





Pulvex

The Guaranteed Flea Powder

One application of Pulvex—the odorless and non-poisonous Flea Powder—will kill every louse, flea, tick, or mite on any animal or bird. It will also prevent reinfestation of fleas for many days. Pulvex is safe to use on dogs, cats, or birds, and is guaranteed to satisfy. 2-oz. pkg. 50 cts.; 12-oz. pkg. \$1.25, postpaid.

Pulvex 6-Use Dog Soap

Make your dog's bath more than just a bath. Pulvex Soap cleans thoroughly, tones, stimulates and oils the skin and coat, kills fleas and lice, and destroys "doggy" odors. Large cake 50 cts.

Pulvex Dry Cleaner

An odorless, harmless powder that cleans your dog or cat without water. Kills fleas and lice, removes doggy odors. Easy to use—no fuss or muss. 4-oz. tin 50 cts.

Pulvex Combination Treatment Worm Capsules

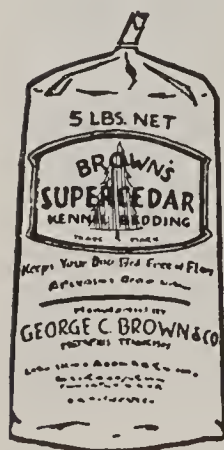
The Pulvex package contains capsules to give your dog a complete treatment for round, hook, and tapeworms. Pkg. (28 capsules) 75 cts., postpaid.

Be Proud of Your Dog—Use SANO-SEN

Sano-Sen Antiseptic. Kills fleas, lice, and ticks on all household pets, also removes disagreeable odors. Use it diluted 1 part to 64 parts water. 4-oz. bottle 50 cts.

Sano-Sen Spray. A handy form of Sano-Sen Antiseptic to use between shampoos. Also a convenient way to spray mats, baskets, kennels, or other sleeping quarters. 12-oz. bottle 50c.

Sano-Sen Shampoo. Finest liquid soap and medications to keep the coats of dogs lustrous, glossy, and healthy. Also excellent to kill odors. Much easier to use than bar soap. 6-oz. bottle 50c.



Brown's Supercedar Kennel Bedding

Made from genuine *Juniperus virginiana*, the red heart of which contains the fragrant oil of cedar. It is scientifically air-dried to retain its full oil-content. The pungent aroma, so pleasing to you and your dog, actually drives fleas and other vermin away. It not only provides a velvety cushion for a dog, but imparts a gloss to his coat, keeps his hair live, clean, and oily, and keeps the kennel pleasant and wholesome. A pillow filled with it makes an ideal bed for cats and other animal pets. 5-lb. bag 45 cts.; 25-lb. bag \$1.45; 50-lb. bag \$2.45; 100 lbs. \$4.60.

CAT FOODS AND MEDICINES

Spratt's Tablets for Constipation.....	\$0 60
Spratt's Purgative Tablets.....	60
Spratt's Special Tablets. A diuretic and stimulant.....	I 00
Spratt's Tonic and Condition Tablets.....	60
Spratt's Capsules for Ascarids and Large, Round Worms in Cats.....	60
Spratt's Food with Fish and Milk. A complete food for cats.	30
Kit-E-Ration. A balanced ration ready to serve. 1-lb. can 15 cts., 2 for	25
Rival Cat Food. Specially prepared food for cats. 8½-oz. can 10 cts., 3 for	25
Bennett's Crumbs. A food for cats.....	15
Catnip Mouse. Makes kittens playful.....	10
Cat Culture. A complete treatise on the care of cats.....	15



Bird Foods and Remedies

Spratt's Egg-Flake and Fruit Canary Mixture. 15-oz. pkg.....	\$0 25	Postpaid \$0 30
Spratt's Cod-Liver Oil Cage-Bird and Nestling Food. For feeding young birds and old birds in the moulting season. A tonic and flesh and bone-maker. Unequaled as an aid to feather-growth. 4-oz. pkg.....	15	20
Spratt's Song Restorer. Invaluable in strengthening the voice. 4-oz. pkg.....	20	25
Spratt's Sing-Song. For health and song.....	10	15
Spratt's Tonic for Birds. 1-oz. bottle.....	10	15
Spratt's Parrot Mixture. Combination of carefully selected seeds, etc. 10-oz. pkg.....	20	25
Spratt's Pollicrackers. Specially prepared biscuits for parrots. 12-oz. pkg.....	20	25
Bird Manna. Keeps cage-birds in constant song, improves their plumage, and prevents disease....	15	20
Silver Brand Bird Gravel. 30-oz. pkg.....	15	20
Chamberlain's Bird Gravel. 24-oz. pkg.....	15	20
Chamberlain's Perfect Bird Food. Canary seed mixture with vegetable and egg flakes. 11-oz. can 25 cts., 55-oz. can.....	I 00	I 15
Burnett's Bird Nesting.....	10	15
Burnett's Canary Louse Powder. 1-oz. pkg.....	20	25
Burnett's Unexcelled Bird Food. A song restorer. 3½-oz. pkg.....	25	30
Burnett's Bird-Wash. For use on canary birds and parrots. Non poisonous. 3-oz. pkg.....	25	30
Burnett's Celebrated Tonic for Birds. For loss of song, weakness, or moulting, asthma or hard breathing and colds. 3-oz. pkg.....	25	35
Burnett's Polly Nut Mixture. A combination of seeds, nuts, and grains for parrots. 9-oz. pkg. ..	25	30
Magic Song Restorer and General Health Food. For all-seed-eating birds. 6-oz. pkg.....	25	30
Dr. Gunnings Universal Bird Tonic. For loss of song, weakness, asthma and all other diseases of cage-birds.	35	40
Justrite Rol-Er-Ka-Nar-E Bird Seed. 1-lb. pkg...	25	35
Justrite Imported Bird Seed. 1-lb. pkg.....	25	35
Justrite Love Bird Seed. 1-lb. pkg.....	25	35
Justrite Parrot Food and Polly Crackers. 20-oz. pkg.	25	35
Justrite Song Restorer.....	25	35
Justrite Vitamine Health Food. A body-builder...	25	35
Justrite Feather-pulling Food. For all cage-birds..	25	35
Justrite Bird Jelly. For catarrh and colds.....	25	35
Justrite Bird Salve. For sore feet or swollen legs..	15	20
Justrite Bird Tonic. For hoarseness and loss of appetite.....	25	30
Justrite Bird Bitters. For colds.....	25	30
Justrite Moulting Food.....	25	35
Justrite Color and Pepper Food.....	25	30
Recleaned Spanish Canary Seed, in bulk. The genuine Spanish canary seed. Keeps canaries in full song. Lb. 15 cts., 8 lbs. for.....	I 00	I 20
Large Japanese Bird Rape Seed, in bulk. Lb. 15 cts., 8 lbs. for.....	I 00	I 20
Scott's Canary Seed Mixture, in bulk. Composed of best recleaned Spanish Canary Seed and Japanese Rape Seed. Lb. 15 cts., 8 lbs. for....	I 00	I 20

Fish Foods

Burnett's Natural Fish Food. Pkg. 10 cts.
Burnett's Dried Daphnien. Pkg. 15 cts.
Burnett's Shrimp Fish Food. Pkg. 10 cts.
Burnett's Tropical Fish Food. Pkg. 15 cts.
Burnett's Turtle Food. Pkg. 15 cts.
Burnett's Aquarium Cement. Pkg. 25 cts.
Justrite Natural Fish Food. Can 10 cts.
Justrite Tropical Fish Food. Can 10 cts.
Justrite Imported Pure Shrimp. Can 10 cts.
Spratt's Wafer Fish Food. Large carton 10 cts.
Spratt's Tropical Fish Food. 10 cts. each.

Spratt's Dog Medicines



	Postpaid
Tablets for Constipation	\$0 60
Sulfur Tablets. For heated blood, etc....	60
Cough Tablets. Generally effect a quick cure.	60
Astringent Tablets for Dogs. To relieve diarrhea.....	60
Special Tablets. A diuretic and stimulant. I	00
Ear Canker Ointment. For both internal and external forms of this disease.....	75
Eye Lotion Tablets. A safe and efficient remedy.....	60
Flea Powder. For dogs, cats and other animals	30
Mange Medicine.....	75
Purgative Tablets. Perfectly safe and effective.....	60
Tonic and Condition Tablets. To build up after sickness..	60
Worm Capsules for Puppies.....	60
Worm Capsules for Dogs.....	60
Dry Cleaning Powder.....	30
Dog Soap (White). For fleas, lice, etc.....	25
Antiseptic Germicidal Flea Soap.....	30
Liquid Shampoo. Also recommended for use by humans..	30
Chalk Block. For dry cleaning dogs and cats.....	25

Glover's Imperial Dog Medicines

	Postpaid
Puppy Capsules. To expel round and hookworms.....	\$0 60
Round Worm Vermifuge. For puppies, dogs, foxes, and cats.	60
Round Worm Capsules. For puppies, dogs, and foxes....	60
Tapeworm Capsules. For puppies, dogs, foxes, and cats...	60
Tetrachlorethylene Capsules. For hookworms and round worms in puppies, dogs, foxes, and cats.....	60
Condition Pills. Stimulant, digestive, appetizer, tonic....	60
Laxative Pills. For sluggish bowels and acute constipation.	60
Diarrhea Mixture. To check looseness of the bowels from simple inflammations and improper feeding.....	60
Compound Sulphur Tablets. Act upon the kidneys and intestines.....	60
Nerve Sedative. For fits and convulsions.....	60
Mange Medicine for Sarcopic Mange. Local application for mange and chronic eczema of dogs.....	75
Kennel and Flea Soap. Kills fleas and lice.....	25
Medicated Soap. A cleansing bath soap for house dogs...	30
Flea and Insect Powder. For animal and household use...	50

Free Dog Book for Distribution

Q-W Dog Remedies

Condition Powder. A general conditioner.....	I 00
Cough Mixture. Often gives immediate relief.....	65
Sedative Tablets. For treatment of fits.....	95
Tapeworm Mixture. Will not injure most delicate dog. .	I 00
Worm Capsules. For large round worms.....	65
Worm Mixture. Quick, sure and safe.....	65
Insect Powder. Kills instantly fleas and lice.....	50
Sarcopic Mange Lotion. Dressing for mange and itch....	I 00
Dog Soap. Has a pure, clean, pleasant odor.....	35
Tonic. For loss of appetite, etc.....	65
Constipation Pills. A quick, safe laxative.....	65

Rex Hunters Condition Powders. A well-balanced blood-purifier. Improves the appetite, prevents and overcomes scratching, eczema, etc. Pkt. of 8 capsules, 25 cts.

Karswood Dog Condition Powders. Suitable for all breeds of dogs at all ages. Keeps dogs in splendid condition. Give a dose once every week. Pkt. of 12 powders, 35 cts.

Karswood Worm Powders. For puppies and medium- and large-sized dogs. Pkt. of 6 powders, 50 cts.

One Spot Flea Killer. Kills fleas and lice on dogs and cats. 1-oz. tin 25 cts.

Doggrow Flea Killer. For dogs and cats. 3-oz. can 50 cts.

Doggrow. A dry shampoo and deodorant. Specially recommended for puppies and house dogs. 10-oz. can 50 cts., postpaid.

Trix Repellent. Repels dogs when females are in season. Bottle 50 cts.

Pulvex Pine Oil Disinfectant. For use in the home and kennel. Has a pleasant odor. 8-oz. tin 50 cts.

Sergeant's DOG MEDICINES

	Postpaid
Special Medicine. For treating fever in pups and dogs.	\$1 20
Mange Medicine. For treating skin diseases.....	65
Condition Pills. A tonic and alterative for pups and dogs.	60
Sure-Shot Liquid. For pups and older dogs. For owners who prefer a liquid vermifuge for round worms.....	60
Expectorant Medicine. For coughs and colds.....	60
Puppy Capsules. For round and hookworms.....	60
Eye-Wash. For treating eye trouble in pups and dogs....	60
Sure-Shot Capsules. For round worms, pinworms and hookworms in older pups; also for large and older dogs..	60
Tapeworm Medicine. For tapeworms in pups and dogs....	60
Arsenic and Iron Pills. (Compound.) A blood purifier. For treating blood and skin diseases.....	60
Canker Wash. For treating internal and external ear canker	60
Mouth Wash. For treating sore mouth and black tongue ..	60
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